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THE EFFECTS OF LEGISLATIVE
CHANGES IN 1981 AND 1982
ON THE FOOD STAMP PROGRAM
Volume I

FINAL REPORT TO CONGRESS

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Executive Summary

Background

In 1981 and 1982, the 97th Congress enacted three separate laws--the Omnibus Budget Reconciliation Act of 1981 (OBRA), the Food Stamp and Commodity Distribution Amendments of 1981 (the Farm Bill), and the Food Stamp Act Amendments of 1982 (the 1982 Amendments)--that directly affected the administration and benefits of the Food Stamp Program. These changes were part of a broader legislative agenda to reduce the size of the public sector in the national economy. At the time of enactment, there was also interest in understanding the effects of these changes on recipient benefits and caseload growth. Thus, the 1982 Amendments directed the Secretary of Agriculture to study the effects of the legislative changes and report to Congress. This report presents the findings of that study, carried out by The Urban Institute for the Food and Nutrition Service, USDA.

The major purpose of this study was to collect and integrate empirical evidence on the effects of the 1981 and 1982 legislative changes in the Food Stamp Program. Among other things, the current study found that:

- o The legislation of 1981 and 1982 had a perceptible impact on food stamp caseloads, average benefits, and total costs, but far less than was previously expected.
- o The composition of the caseload did not change as a result of the legislation.
- o While cost of living delays decreased the purchasing power of benefits for a temporary period, subsequent adjustments restored the value of maximum benefits to previous levels.
- o The average incomes of food stamp recipients were virtually unchanged over the period in which the legislation was implemented.

- o While the recession affected the number of program participants to some degree, the impact on caseloads and costs was far lower than expected because the relationship between the Food Stamp Program and the unemployment rate is far more complex than previously thought.

These findings differ somewhat from previous perceptions of the impact of the 1981 and 1982 legislation and appear to be in direct conflict with other analyses that have implied a far more dramatic and negative effect on food stamp recipients. This study differs from many previous analyses--including the interim report submitted to Congress by the Food and Nutrition Service--which attempted to estimate the effects of the changes before their enactment or shortly afterwards. While the earlier studies generally relied on the best data then available, insufficient time had passed to accumulate enough information following implementation of the new rules. Thus, changes in program size, participant characteristics, and benefit amounts attributable to the legislative changes could not be measured effectively. The study reported here expands the earlier work in at least two major ways: first, it relies on new data collected specifically for this report; second, it consists of several major reanalyses of existing data to measure the actual effects of the legislative changes.

The analysis of the effects of program changes is complicated by (1) the nature of the Food Stamp Program and its relationship to other income maintenance programs, demographic trends, and economic conditions, (2) the complexity of the legislative changes, and (3) the timing of their implementation.

The Nature of the Food Stamp Program. Four aspects of the Food Stamp Program complicate the analysis. First, while the Food Stamp Program was permanently authorized in 1964, it has undergone several major transformations since then, some of which significantly altered both the size and composition

of the food stamp caseload. Uniform national eligibility guidelines were introduced in 1971, the program was expanded to every county in the United States and Puerto Rico by 1975, and the reforms embodied in the Food Stamp Act of 1977--particularly the elimination of the purchase requirement--were implemented in 1979. The full effects of the 1977 amendments probably did not run their course until 1980. Thus, the program in its current form had been in place for a relatively short time when OBRA was enacted. This increases the difficulty of determining the precise effects of the 1981-82 legislation since there was not sufficient historical evidence on how the program would have behaved in the absence of that legislation.

Second, the Food Stamp Program serves a broad segment of the low income population because of the absence of categorical restrictions on eligibility. To some extent, then, changes in caseload characteristics will reflect underlying trends in the demographic and income characteristics of the low income population, independent of any policy change.

Third, many food stamp recipients also participate in other government transfer programs. The most common sources of other income among food stamp recipients are Aid to Families with Dependent Children, Supplemental Security Income, and Social Security. The income from each of these transfer programs is counted when determining a household's food stamp benefit. Changes in these programs over the same period have indirect effects on Food Stamp Program participation and costs that are not easily distinguished from the direct effects of the food stamp changes.

Fourth, the Food Stamp Program is responsive to general economic conditions. The Food Stamp Program has traditionally counteracted swings in the business cycle. The number of participants tends to increase in a recessionary economy as the number of unemployed persons increases, the

duration of unemployment lengthens, personal income falls, and the number of persons with income below the poverty level increases. As the economy recovers and personal income, employment, and poverty status improve, participation in the program falls. Economic performance can also have a direct effect on program costs because several program provisions (maximum coupon allotments, certain deductions, and the income limits) are indexed to account for the effects of inflation. Here again, the indirect effects of recent changes in economic conditions are not easily separated from the legislative changes.

The Complexity of the Legislative Changes. Over 95 separate legislative changes were made in the Food Stamp Program in 1981 and 1982. About 40 percent of these provisions modified program eligibility requirements or benefit amounts, but a relatively small number of changes were expected to generate most of the program savings. Some of the changes--introduction of a limit on gross income at 130 percent of the poverty level, reduction of the earned income deduction from 20 percent to 18 percent, and proration of the first monthly benefit to the day of application, for example--permanently altered program rules and benefits. In general, these permanent changes were not expected to affect all participants, but rather were expected to affect smaller groups (such as those with incomes above 130 percent of the poverty line or those with earnings). Other changes--such as delays in making cost of living adjustments for allotments and deductions--had only temporary effects. While these changes were expected to affect most participants, the largest effects were expected to occur in Fiscal Year 1982 with smaller effects in subsequent years. This makes the analysis of benefit changes highly dependent on the time period selected for analysis.

Finally, many of the legislative changes were implemented simultaneously in most states. As a result, it is difficult to isolate the effects of the legislative changes from the effects of changing economic conditions, and it is difficult to separate the independent effects of each legislative change.

The Pattern of Recent Program Growth

Program experience between Fiscal Years 1981 and 1984--as measured by the average number of participants each month, the average benefit per person, and total program expenditures--reflects the interaction of the Food Stamp Program policy changes, policy changes in other programs, economic conditions, and demographic trends. In general, all three indicators show some growth over this period, but there are also substantial variations over time.

Average monthly participation in the program declined from 20.6 million to 20.4 million participants between Fiscal Years 1981 and 1982, increased to an historic high level of 21.6 million people in 1983, and then fell again to 20.9 million in 1984. Over this same period, the average unemployment rate, a measure which has been associated with changes in caseload size, increased from 7.1 percent in 1981 to 10.1 percent in 1983 before falling to 7.8 percent in 1984.

The average monthly food stamp benefit grew 8.5 percent between 1981 and 1984, from somewhat more than \$39 per recipient to just under \$43. After adjusting for changes in food prices over this period, the real value of food stamp benefits was unchanged, indicating that the purchasing power of the benefit was largely maintained. There were, however, sizable fluctuations in the value of real benefits over this time. The real value of the average food stamp benefit per person fell about 4 percent in 1982, increased by nearly 9 percent in 1983 (after the October 1982 cost of living adjustment to food stamp allotments) and then fell by about 3 percent in 1984.

Total program costs grew in both nominal (12 percent) and real (5 percent) terms between 1981 and 1984, increasing from \$10.3 billion to \$11.6 billion. Again, the pattern of growth was not continuous, as program costs declined from \$10.3 billion to \$10.6 billion between 1981 and 1982, increased to \$11.9 billion in 1983, and fell to \$11.6 billion in 1984.

No single source of information could be expected to disentangle all of the factors that influenced this pattern of program participation, benefits, and costs since 1981. Instead, the analysis presented in this report relies on many existing data sources, a major new data collection effort, and a variety of analytic approaches. The major analyses include:

- o A time series analysis of monthly changes in the size of the Food Stamp Program in each state;
- o A macroeconomic analysis of the relationship between the economy as a whole and Food Stamp Program participation and costs;
- o A longitudinal analysis of data from a new survey of more than 6,700 case records of households participating in the Food Stamp Program between October 1980 and December 1983;
- o Analyses of data from cross-sectional surveys of households participating in the Food Stamp Program at selected points before and after implementation of the legislative changes; and
- o A microsimulation model of the transfer income system as a whole.

Detailed Results: Food Stamp Program Policy Changes

The findings of this study support the conclusion that the changes enacted in 1981 and 1982 did not fundamentally change the basic structure of the Food Stamp Program. As a result, the effects of the legislative changes on the number of participants, average benefits, and total program costs were smaller than originally expected.

Caseload Effects. For the most part, none of the models or analyses show a consistent, statistically significant, independent effect of the legislative changes on the number of Food Stamp Program participants, once changing economic conditions and demographic characteristics are controlled. There was some evidence, although not generally statistically significant, of a possible reduction in the range of 250,000 to 500,000 persons from the level that would have been expected under the pre-OBRA law. This represents a reduction of about 1 to 2 percent.

Benefit Effects. Average monthly household benefits were \$3 to \$4 less in 1982 as a result of the OBRA changes. In real terms, after accounting for changes in food prices over this period, average benefits were \$6 to \$8 less than would have been expected. This represents a reduction of about 3 to 4 percent in average nominal benefits and 6 to 8 percent in average real benefits.

The benefit effects in later years are substantially less than the 1982 effects. Cost of living adjustments in Fiscal Years 1983, 1984, and 1985 raised maximum allotments to levels comparable to--and in some months, higher than--their expected levels under the pre-OBRA law. Adjustments were also made to the standard deduction and to the ceiling on the combined value of the excess shelter and dependent care deductions in each of these years. Because of a change in the reference period on which the adjustments were based, however, these deductions are about 14 percent and 11 percent less, respectively, than the levels expected under the pre-OBRA law.

Total Cost Effects. The study found that the legislative changes--independent of changing economic conditions and demographic characteristics--reduced program costs in Fiscal Year 1982 by about \$450 million to \$650 million, a reduction of about 4 to 6 percent. These savings are well below

the level of savings expected at the time of enactment of the 1981 and 1982 legislation. Several factors tended to reduce the actual savings relative to the original projections. Most notably, the projections were based on assumptions about the performance of the economy--particularly about the course of food price increases--that were not borne out.

Detailed Results: The Influence of Other Factors

Given the evidence that the legislative changes had a relatively small direct effect on food stamp participation and costs, three additional hypotheses concerning the growth and composition of the food stamp caseload between 1981 and 1983 were explored. The first is that demographic changes, either in the population eligible for food stamps or in the population actually receiving food stamps, may account for some of the caseload size and benefit effects seen over this period. The second is that economic factors particularly characteristic of the most recent recession may have affected these patterns. The third is that the effects of legislative changes in other assistance and transfer programs enacted and implemented at the same time may have influenced the size of the observed Food Stamp Program effects.

Demographic Changes. In general, the composition of both the food stamp caseload and the poverty population was relatively stable between 1980 and 1983. There were two major trends that characterized both groups. First, there was a decline in the proportion of elderly persons. And second, there was a somewhat smaller decline in the proportion of households with earners. The evidence indicates that these changes were part of long term trends that began before 1981 and so were independent of the legislative changes. An analysis of the impacts of changes in caseload composition on benefit levels indicates that the average food stamp benefit per household would have

been about \$4 per month higher in August 1982 if there had been no change in the composition of the caseload between August 1981 and August 1982.

Economic Conditions. Several analyses confirm the existence of a strong relationship between economic performance and the number of Food Stamp Program participants. A macroeconomic model of the Food Stamp Program found a positive association between the number of recipients and the unemployment rate, the fraction of the unemployed who were out of work for more than a year, and the poverty rate, and a negative association with real wage rates (although the latter variable was of only marginal value). To some extent, each of these measures are proxies for the likelihood that households will be eligible for and participate in the Food Stamp Program. Of these variables, the unemployment rate was most important.

A second analysis using the time series of monthly changes in the size of the caseload in each state confirmed the importance of unemployment. But the analysis also suggested that the relationship between unemployment and the food stamp caseload is quite complex. Specifically, there is a direct effect of changes in the unemployment rate: if the unemployment rate rises by one percentage point, the number of program participants will increase by 50,000 in a single month. This basic effect, however, is modified in the following ways:

- o If the initial level of unemployment is relatively high, the marginal effect of a change in the unemployment rate is increased;
- o If the number of unemployed receiving unemployment insurance benefits is relatively high, the marginal effect of a change is reduced; and
- o If unemployment rates are rising through time, the marginal effect of a change is increased; conversely, if unemployment rates are falling through time, the marginal effect of a change is reduced.

Given prior expectations about the importance of these economic measures, the Food Stamp Program appeared to respond more slowly than usual to the 1981-82 recession. Two possible explanations for this appearance are explored.

First, the way in which economic conditions affect the number and characteristics of program participants is complex and may have changed over time. The most recent lengthy recession differed in many important ways from the 1973-75 recession. Some of these differences--a sharp decline in inflation, a smaller percentage decline in real GNP and disposable personal income, greater labor force participation among women and more two-earner couples (both of which provide additional insurance against spells of unemployment), and rising personal consumption expenditures--might be expected to decrease program participation. Other differences--the record levels and lengthening duration of unemployment, the falling proportion of unemployed receiving unemployment insurance benefits, and the rising poverty rate--might be expected to increase program participation. Unfortunately, there is not enough information available to address the net importance of these differences adequately.

Second, the nature of the Food Stamp Program has changed over time. The character of the program in 1973-75 was quite different from its character in 1981-82. The earlier recession coincided with the nationwide expansion of the program to every county in the United States and Puerto Rico. Some of the apparent response to the 1973-75 recession can be attributed to this expansion. In 1979, implementation of the reforms of the Food Stamp Act of 1977--especially the elimination of the purchase requirement--significantly changed the basic structure of the Food Stamp Program. This change affected both the size and characteristics of the food stamp caseload, and it may have altered its relationship to economic conditions.

Interactions with Other Programs. The food stamp legislation in 1981 and 1982 was accompanied by significant changes in the major cash assistance programs, including Aid to Families with Dependent Children, Supplemental Security Income, Social Security, and Unemployment Insurance. This study found, however, that the combined effect of the AFDC, SSI, and Social Security legislation on the Food Stamp Program was small. In contrast, the net effect of changes in UI policy may have been a significant increase in the number of households eligible for food stamps. Taken individually, the study concludes that:

- o The AFDC legislative changes had no significant effect on either the food stamp caseload or average benefits. A microsimulation analysis of the AFDC policy changes shows a small decrease in food stamp caseload and a small increase in average food stamp benefits. The case record and Quality Control data found no change in average benefits, but a slight increase in the number of food stamp households with AFDC.
- o The SSI legislative changes reduced food stamp benefits slightly, but had no effect on caseload size.
- o The Social Security legislative changes had no significant effect on either the food stamp caseload or average benefits.
- o The Unemployment Insurance legislative changes resulted in a significant decrease in the number of unemployed with UI benefits. Such a decrease in UI beneficiaries should have a strong impact on food stamp eligibles. Because of the complexity of the state UI programs and of the legislative changes made to UI in 1981 and 1982, it is difficult to estimate the precise impact of changes in UI on the participation behavior of food stamp eligibles. A rough estimate done as part of this study shows that a 24 percent decrease in the number of persons with UI benefits would have increased the number of households receiving food stamps by about 800,000. But the decrease in UI costs from such a change would be five times greater than the increase in Food Stamp Program costs.

A Perplexing Result

Between 1979 and 1984, monthly Food Stamp Program statistics show a general upward trend in the number of participants with only a few periods of small decreases. This pattern of general growth, however, masks a striking, but as yet unexplained, result uncovered by a regression analysis of changes in state food stamp caseloads. After controlling for a number of demographic, economic, and policy factors that influence program participation--including implementation of the 1981-82 legislative changes--this analysis found a strong, negative effect that reduced the number of food stamp participants. This effect begins in 1979 and achieves a growing significance over time, particularly in the period between 1980 and 1983. By 1983, it is estimated that this unexplained effect was decreasing the number of food stamp participants by over 600,000 persons. In other words, there are 600,000 fewer program participants than would be expected given the pattern of change in important economic, demographic, and policy variables. Conclusive evidence on the source of this effect is not available from this study. But because it first appears in 1979, well before the implementation of OBRA, the recent legislative changes are not plausible explanations. It may, however, partially explain why the legislative effects on caseload size were smaller, and the response to the most recent recession slower, than expected.

Chapter I

Introduction and Overview

This report examines the impacts of legislative changes implemented in the Food Stamp Program in 1981 and 1982. These changes were enacted under three different pieces of legislation, the Omnibus Budget Reconciliation Act of 1981 (OBRA), the Food Stamp and Commodity Distribution Amendments of 1981 (Farm Bill), and the Food Stamp Act Amendments of 1982 (1982 Amendments), and were part of an overall legislative agenda to reduce the size of the public sector in the economy.

The legislation of 1981 and 1982 included a combination of administrative improvements and changes in benefit and eligibility rules. Among the principal provisions were:

- o Delays in the cost of living adjustments in both the food stamp allotments and various deductions;
- o Implementation of a new gross income ceiling for purposes of determining eligibility (in addition to the existing net income ceiling);
- o Changes in the earnings deduction; and
- o Changes in benefits for new applicants.

In addition to concerns about the growth and costs of the Food Stamp Program, there was also interest in understanding the effects of these changes on recipient benefits and caseload growth. Thus, the 1982 Amendments directed the Secretary of Agriculture to study the effects of the 1981-82 legislation and report to Congress.

This report presents the findings of that mandated study, carried out for the Department of Agriculture by The Urban Institute, under the supervision of the Office of Analysis and Evaluation of the Food and Nutrition Service. The major purpose of this study was to collect and integrate empirical evidence on

the effects of the 1981-1982 changes in the Food Stamp Program. This report extends the analyses contained in an interim report submitted to Congress by the Food and Nutrition Service in May 1984. (That report discussed the overall program and the recent legislation in detail and presented some preliminary findings on the net impacts of program and economic changes.)

Among other things, the current study found that:

- o The legislation of 1981 and 1982 had a perceptible impact on food stamp caseloads, average benefits, and total costs, but far less than was previously expected;
- o The composition of the caseload did not change as a result of the legislation;
- o While cost of living delays decreased the purchasing power of benefits for a temporary period, subsequent "catch-up" adjustments restored the value of maximum benefits to previous levels;
- o The average incomes of food stamp recipients were virtually unchanged over the period during which the legislation was implemented;
- o While the recession affected the number of program participants to some degree, the impact on caseloads and costs was far lower than expected because the relationship between the Food Stamp Program and the unemployment rate is far more complex than was previously thought.

These findings differ somewhat from previous perceptions of the impact of the 1981 and 1982 legislation that implied a far more dramatic and negative effect on food stamp recipients. The interim report to Congress, for example, indicated that the legislative changes were expected to remove approximately 875,000 recipients from the food stamp rolls and that cost savings would total almost \$1.5 billion in 1983. The Congressional Budget Office (CBO) estimated savings of \$2.2 billion in 1982 and caseload reductions of one million persons.

The findings of this study indicate that cost savings for the provisions affecting recipient benefits were in the range of \$450 - \$650 million in 1982

and that caseload reductions amounted to 250,000 to 500,000 persons. This is less than half the size of the effects previously estimated. (These estimates do not include the costs of the Food Stamp Program in Puerto Rico nor the savings associated with the block grant there.)

Why the difference? There are three reasons why previous estimates and analyses were not able to capture the independent effects of OBRA and the other legislation:

- o First, previous estimates were based on computer simulations rather than on analysis of actual data on recipients and costs. The most important goal of this study was to maximize the use of directly observed data on the changes in the Food Stamp Program and its recipients.
- o Second, the legislative changes of 1981 and 1982 occurred in a period of rapid change, not only in the Food Stamp Program, but in income transfer programs that affect food stamp recipients and, most importantly, in the economy. It is very difficult during such periods to identify the separate effects of all of these changes since they tend to interact with one another. Some previous analyses have been hampered because they were unable to control for these other events.
- o Third, some program changes in the legislation had a temporary effect on recipients; other trends began before the legislation was enacted. The magnitude of the 1981-82 legislative changes contained in OBRA, et al. are better understood in the context of a longer run analysis. It is important not to focus on the Food Stamp Program only between 1981 and the present.

The Urban Institute recognized that a complete analysis of the impacts of OBRA, the Farm Bill and the 1982 Amendments would not be possible using only published data or the analytic methods used in previous studies. As the interim report noted:

No single source of information nor analytic approach can be expected to disentangle every possible interaction that influenced program participation since 1981.¹

1. U.S.D.A. Food and Nutrition Service, Office of Analysis and Evaluation, "The Effects of Legislative Changes in 1981 and 1982 on Food Stamp Program Benefits," Interim Report to Congress, May 1984, page 11.

Accordingly, The Urban Institute undertook a study of the effects of the 1981-82 legislation which exhaustively examined recipient impacts from a variety of approaches. The purpose of the study was not to re-estimate the effects but to collect and integrate empirical evidence on them. This study involved the analysis of several separate data sources through the use of different quantitative models. It differs from previous analyses in at least two significant ways. First, the study relies on new data collected directly from recipient records for the purposes of evaluating the legislative effects. Second, the study conducts several major reanalyses of existing data to measure the actual effects.

The remainder of this introduction will discuss in more detail the complexities of analyzing the legislative effects and explain how the current study attempted to overcome these complexities.

The Difficulties in Isolating Legislative Effects. Initial indications of the effects of the 1981-82 legislation were somewhat confounding. The Department's Interim Report to Congress¹ noted that the rate of program growth slowed considerably (and, for a short period, actually declined) following the implementation of the early OBRA provisions in October 1981. At the same time, Food Stamp Program levels reached historical highs both in terms of expenditures and numbers of recipients. The daily newspapers and nightly newcasts contained reports of families who were apparently worse off in the post-1981 period than before. At the same time, developing program data showed average benefits virtually stable while participation was rising.

It is not surprising in retrospect that the information about the effects of the legislation on recipients appeared to be inconsistent during this

1. Op cit., Chapter Five.

period. There were a large number of changes implemented in OBRA and the succeeding 1981 and 1982 legislation, some of which had overlapping and perhaps conflicting impacts. Additionally, the direct impacts were complicated by events external to the Food Stamp Program which were occurring during this same period.

First, as the 1981-82 reforms were implemented, major changes occurred in the nation's economy, with a rapid rise in the rate of unemployment accompanied by a declining rate of inflation. The unemployment rate rose from 7.2 percent in July 1981 to 10.6 percent in December 1982 while annualized price changes moved from an increase of 13.2 percent to a decrease of 4.8 percent over that same period. Because of the increase in unemployment, it is difficult to establish the independent effect of policy changes by examining program data on the number of participants alone, since caseload reductions induced by policy changes may have been offset by caseload increases due to losses of earnings by potential eligibles.

Second, simultaneous changes were implemented in cash transfer programs, and some of these directly affected food stamp participants and eligibles. In the Aid to Families with Dependent Children (AFDC) program, for example, benefit reduction rates for earned income were increased, a standardized work-expense deduction was implemented, a cap was placed on child care deductions, a gross income eligibility cutoff was implemented, and income counting provisions were expanded. The AFDC changes could have had a significant impact on the Food Stamp Program, since more than 40 percent of food stamp households have AFDC income. Other changes occurred in the Old Age, Survivors, and Disability Insurance program (OASDI or Social Security), in the Comprehensive Employment and Training Act Program (CETA), in the Unemployment Insurance (UI) program, and in veterans' pensions, Civil Service Retirement,

and Supplemental Security Income (SSI). The net effect of these changes was to decrease the income available to a wide segment of potential food stamp recipients.

The complexities of analyzing events during this period are illustrated in a case example from a recent article in Public Welfare.¹ The article documents the case of Anna Burns, a fictional name for a real person, who is a twenty-eight year old mother of three in Georgia. Table 1.1 documents the food stamp benefits of Anna Burns before and after the implementation of the 1981-82 food stamp legislation.

Table 1.1
THE FOOD STAMP BENEFITS OF ANNA BURNS

<u>Benefit Month</u>	<u>Monthly Food Stamp Benefit</u>	<u>Primary Reason for Change</u>
February 1981	\$171	-----
June 1981	160	Increase in State AFDC benefit
September 1981	183	Loss of earnings
November 1981	180	Food stamp OBRA legislation
January 1982	167	Earnings increase; federal AFDC legislation
February 1982	133	Earnings increase
June 1982	188	Earnings decrease; birth in family
August 1982	155	Increase in AFDC benefits due to birth
October 1982	177	Food stamp cost of living catch-up
December 1982	173	Earnings increase
March 1983	192	Earnings decrease

In the two year period between February 1981 and March 1983, Anna Burns' food stamp benefit changed ten times, about once every two months. Only two of those changes were due to the food stamp legislation of 1981-1982: the

1. See Tom Joe and Lorna Potter. "The Welfare System: A Briar Patch for Anna Burns." Public Welfare (Winter 1985): page 5-12.

benefit for November 1981 decreased by \$3 because of changes in the earnings deduction contained in OBRA and the benefit for October 1982 increased by \$22 due to the cost of living catch-up adjustment. Other food stamp benefit changes were due to changes in AFDC, to changes in earnings (which may or may not be related to the economy), and to a demographic change, the birth of a child to one of Burns' minor daughters.

While it is not certain that Anna Burns' experience represents the experience of a majority of food stamp recipients, two things are clear from Table 1.1:

- o First, many events other than food stamp legislation and policy changes affect the benefits of recipients and only a case by case analysis will provide complete information on what happened to benefits.
- o Second, these events can occur in such rapid succession that the points in time which are selected for analysis can affect the conclusions. For example, Anna Burns' food stamp benefit in September 1981, just before the implementation of OBRA, was \$183. If the post-OBRA comparison date was February 1982, when her benefit was only \$133, it might erroneously lead to the conclusion that Anna Burns lost \$50 as a result of OBRA even though the \$50 loss was really due to two interim earnings increases and an AFDC change. The appropriate date in this case would be November 1981 which shows a \$3 loss due to the food stamp earnings disregard change.

The 1983-85 FNS/Urban Institute Study. The case of Anna Burns illustrates the difficulty of isolating the effects of OBRA and other legislation and suggests that an appropriate study design must be carefully thought out.

The specific purpose of the research undertaken for this report was to identify the independent effects of events such as those experienced by Anna Burns on the whole food stamp population in the period between 1980 and 1984. Four factors were the major focuses of the analysis. These were:

1. Demographic changes in the low income population;

2. Changes in economic factors such as the unemployment rate;
3. Policy changes in other income support programs; and
4. Legislative changes in the Food Stamp Program.

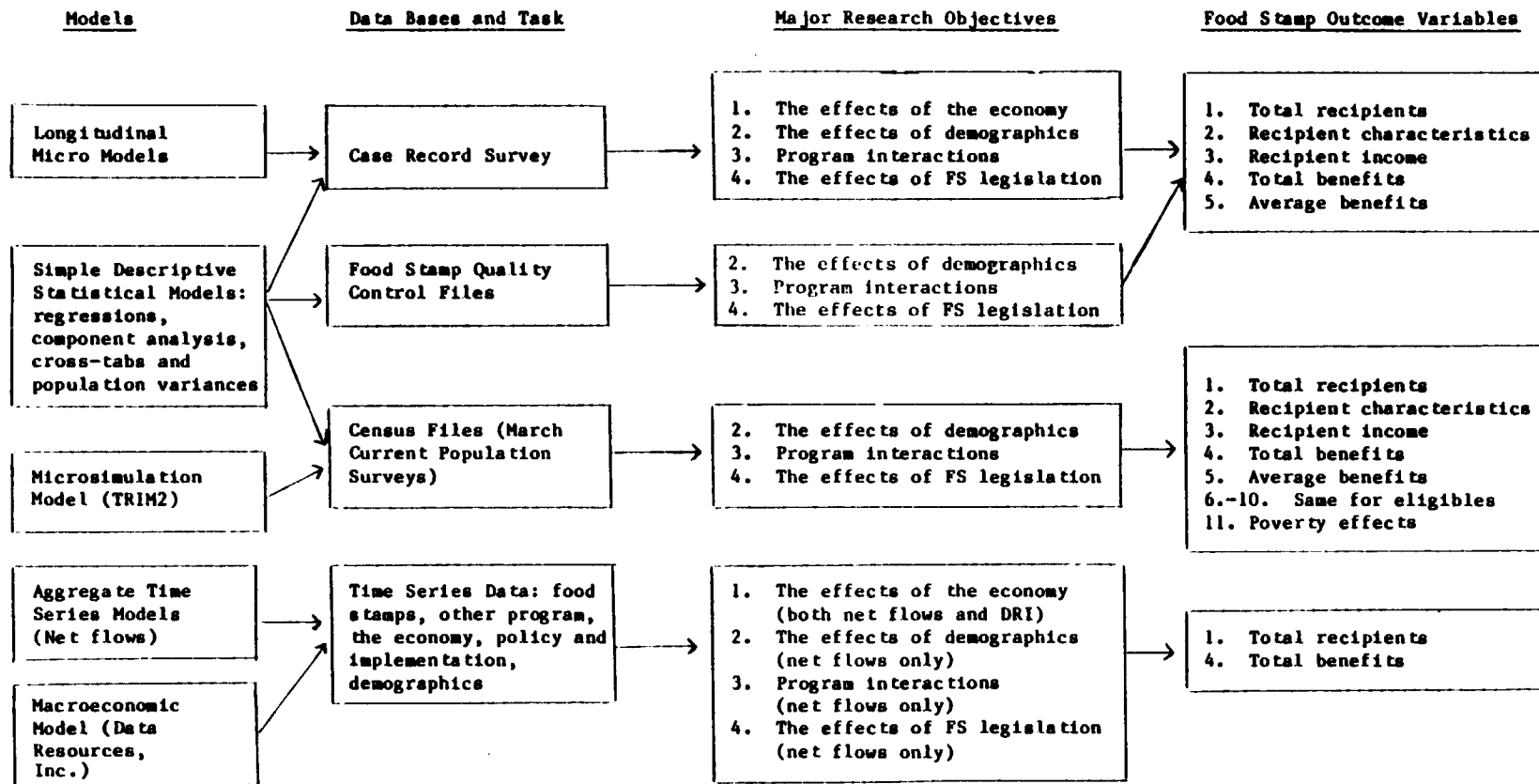
The first two of these factors are for the most part independent of both food stamp and government transfer policy in general (although changes in food stamp eligibility rules could affect the demographic composition of the food stamp caseload). The third factor, although it is under the control of policy-makers, is not subject to influence by food stamp policy. In order to estimate accurately the impacts of food stamp policy on the characteristics and incomes of recipients, the impacts of the other factors outlined above must be taken into account. A significant part of this research, therefore, has been devoted to efforts to control for these factors.

The study developed by The Urban Institute and approved by FNS used all major existing data bases relating to the Food Stamp Program and a variety of different quantitative models to examine the program and its recipients. Additionally, the study analyzed a major new survey of food stamp households conducted for The Urban Institute by Market Facts, Inc. The purpose of the multiple approaches was to achieve an analytical consensus on the impacts of the 1981-82 legislation and to separate them from the impacts of changes in the economy and in other federal and state policies. Figure 1.1 gives an overview of the research design and its objectives.

The analytic approaches used in this study can be broadly categorized into those that rely primarily on aggregate data concerning the program and the economy, and those that employ micro level data on specific households eligible for and participating in the Food Stamp Program. The two aggregate level approaches were:

Figure 1.1

AN OVERVIEW OF THE PRINCIPAL ELEMENTS OF THE RESEARCH DESIGN



1. A time series analysis of the monthly changes in the size of the Food Stamp Program in each state; and
2. A macroeconomic analysis of the relationship between the economy as a whole and Food Stamp Program participation and costs using Data Resources Inc.'s Quarterly Model of the U.S. economy and other macroeconomic models.

The three micro level approaches were:

1. Cross-sectional tabular and regression analyses of data from the Food Stamp Quality Control System, which provide information on individual households participating in the Food Stamp Program at selected points in time before and after the implementation of the legislative changes;
2. A microsimulation model of the transfer income system as a whole, based on the 1983 Current Population Survey (CPS) which provides information on the characteristics of households potentially eligible for food stamps; and
3. A longitudinal analysis of data obtained from a nationally-representative survey of more than 6,700 case records of households participating in the Food Stamp Program between October 1980 and December 1983.

The new longitudinal case record data listed last above is of special interest and importance for this study, since this survey provides the only complete information on the impacts of the changes on individuals and households over the 1980-1983 period as a whole. For this reason, these data are discussed in somewhat more detail below than are the other approaches.

Many of the approaches used had overlapping objectives, allowing findings from one approach to be confirmed through research performed for others. This report integrates the findings from these several different approaches. The remainder of this section outlines briefly the components of each approach; more information on each can be found in Appendices B through F, which detail the methodology and findings of the five major research tasks undertaken for this study.

1. Time Series Analysis of Aggregate Caseload Changes (Net Flows Model). The purpose of this analysis was to estimate the effects of certain

policy changes upon the net change in food stamp caseloads from month to month, while simultaneously controlling for other factors such as the demographic composition of the population, economic conditions, and changes in other relevant programs such as AFDC. The model was estimated using aggregate time series data spanning the 1970 to 1983 period, and also using a subset of these data for the 1976-1983 period. The model was formulated in terms of the net changes in caseload size rather than in terms of total participation because it was believed that these changes were more likely to be responsive to changes in the economy and to other factors than was the total number of participants in each month.

The conceptual basis of the model is a series of relationships among case openings, case closings, and the factors that underlie them. These relationships were estimated using state-level data on the net change in caseloads, averaged on a quarterly basis; and data on a wide variety of other variables such as state-level unemployment rates, mean earnings levels and per capita incomes, AFDC case openings and closings, prices, and various business cycle indicators. In addition, Food Stamp Program parameters and indicators relating to the implementation of major policy changes in the Food Stamp Program were included.

2. Analysis of Interactions between the Macroeconomy and the Food Stamp Program. The aim of this approach was to identify the relative impacts of economic factors and legislative changes in the Food Stamp Program. This was accomplished primarily through the development of a set of equations describing the effects of economic factors on Food Stamp Program caseloads and costs, for use with the Data Resources Inc. (DRI) Quarterly Model of the U.S. Economy, the DRI Demographic-Economic (DECO) Model, and the DRI Regional Information Service (RIS) Model. These equations were used to examine the

impacts of changes in the macroeconomy on the Food Stamp Program. In addition, an analysis of the characteristics of the 1981-1982 recession compared to those of the 1973-75 recession was also undertaken. The aim of this part of the task was to identify differences in the characteristics of these two economic downturns that might have had some bearing on their relative impacts on the Food Stamp Program.

3. Analyses of the Food Stamp Quality Control Surveys. The aim of these analyses was primarily to provide descriptive statistics on changes in the composition of the food stamp caseload over time. The Food Stamp Quality Control (QC) System collects data on a continuous basis, to verify benefit computations and compute error rates. Monthly subsamples of these data, which typically consist of about 7,000 case records, are compiled at various intervals to allow an examination of the characteristics of food stamp recipients. These subsamples constitute a series of nationally representative cross-sectional data files containing information on the benefits, incomes, and demographic characteristics of selected food stamp recipient households. These files, therefore, may be used to analyze changes in the food stamp recipient population over time, as well as to examine the relationships between recipients' benefit levels and their incomes and demographic characteristics at particular points in time.

In the context of this study, these data have been used for three major purposes. First, three different data sets spanning the period of implementation for the legislative changes of 1981-1982 were examined in order to determine if any significant changes in the composition of the caseload occurred over this period. Second, separate equations were estimated for each of these samples to examine the relative impacts of different household characteristics on benefit levels, and to see if the importance of these

characteristics changed over the implementation period. Finally, data from all three samples were combined, and changes in benefit levels over the implementation period were estimated, holding constant all other caseload factors.

4. Microsimulation Analysis of Changes in the Transfer Income System and Their Impacts on the Population Eligible for Food Stamps. This analysis used The Urban Institute's Transfer Income Model (TRIM2) to examine the effects of changes in transfer income programs and in other components of household income on food stamp participants. The TRIM2 model operates on a large data base drawn from the Bureau of the Census' March Current Population Survey (CPS), an annual survey containing information on the incomes and other characteristics of more than 50,000 households. The model supplements these data with additional imputations designed to compensate for underreporting and other survey problems, and in addition is designed to allow the effects of alternative policy specifications for particular transfer income programs to be estimated. The microsimulation estimates here differ from previous estimates by FNS in two ways. First, data from the March 1984 Current Population Survey (which contains 1983 income) were used. Previous estimates were based on earlier versions of the CPS. These data were projected forward to represent expectations about economic and demographic conditions in 1982. The more recent data, reflecting actual conditions in 1983, should improve the accuracy of the estimates. Second, both the impacts of the legislative changes in food stamps and the legislative changes in other programs were estimated, separately and in conjunction with each other.

5. Longitudinal Case Record Survey Analysis. In addition to the analyses based on existing data, a further task, involving the collection and analysis of a nationally-representative sample of longitudinal data on about 6,700 food

stamp recipient households, was also performed for this study. The sample design and data collection was performed by Market Facts, Inc. under subcontract to The Urban Institute. The primary purpose of this data collection and analysis effort was to examine the impacts of the various legislative changes as they were implemented on the benefits and participation of food stamp recipients. In order to allow inferences concerning the impacts of the major changes, the sample was drawn from cases active at any time between October 1, 1980 (one year before the implementation of the first changes) and December 31, 1983. Each case was traced over the entire period for which food stamps were received between these two dates.

Data were abstracted from program records at 60 sites across the country, to develop a longitudinal file describing all changes in eligibility, household composition, income and benefit levels, and all administrative actions for each case. In addition to case record data, information was also collected on local program variables, including the details of implementation for each legislative change, and on local economic conditions at each site.

The level of detail of this information, and its longitudinal nature, allow the impacts of specific legislative changes and local economic conditions to be examined in much more detail than is possible with other available data sets. In addition, because recipients are traced for a period of several months or even years, their behavioral responses to the Food Stamp Program changes can be observed. This new data base provides a wealth of previously unavailable information on the impacts of legislation, economic change, and other factors on individual food stamp recipient households over time. Several preliminary analyses have been completed for this report, and new information should continue to emerge from this data set as additional analyses are completed.

Conclusion

The findings of this study indicate that the legislation of 1981-82 did not have as large an impact on recipients as previously thought. Having found this, the study then examined other factors such as demographics, economics and other government policy changes which might have had an impact on food stamp recipients. These findings are also contained in this report.

Before turning to the specific findings of this study, it may be helpful first to review briefly the nature and growth of the Food Stamp Program in order to provide a historical context for understanding the impact of the recent legislation. The next chapter of this report (Chapter II) therefore provides background information on the nature and growth of the Food Stamp Program.

The major findings of the study with regard to the impacts of the 1981-1982 legislation on the Food Stamp Program are presented in Chapter III, which also includes a detailed outline of the legislative changes themselves. Chapter IV discusses demographic changes in the caseload and in the poverty population and their impacts on program size and benefit levels. Chapter V considers the effects of economic changes in the 1980-1983 period, compared both to legislative factors and to economic impacts in the past. The effects of legislative changes in other transfer programs such as Aid to Families with Dependent Children (AFDC) and Social Security are examined in Chapter VI.

Chapter II

The Context of the Analysis:

The Food Stamp Program, 1971-1984

In order to understand the relative importance of the 1981-82 legislation, it is important to understand the background of the Food Stamp Program itself. The program has existed since the early 1960's in various forms and has periodically gone through major reforms. The most significant reforms occurred in the early 1970's when the program was mandated nationally and the late 1970's when the provision requiring the purchase of coupons (at discounted rates) was eliminated.¹ Each of these changes significantly altered the composition of the recipient population. In comparison, the scope of the 1981-82 legislation was relatively small. A brief history of the program will clarify this.

The remainder of this chapter provides background material for the investigation of the program changes of the past several years. It first outlines the nature and operation of the Food Stamp Program today and then traces its development since 1971, with particular emphasis on trends in caseloads and in benefit levels. Aggregate, long-run trends are examined in order to establish the context for recent changes.

The Nature and Operation of the Food Stamp Program

While the Food Stamp Program has much in common with means-tested income maintenance programs such as Aid to Families with Dependent Children (AFDC) or

1. In 1971, nationally uniform eligibility guidelines for the program were established. Universal geographic coverage, however, was not instituted until 1974-75, and, as discussed below, important policy changes have occurred since then. In assessing changes in program parameters over the long term, therefore, it is important to bear in mind that the program itself has undergone some significant changes over these time periods.

Supplemental Security Income (SSI), it has several features that set it apart.

- o The program is available to all who meet income and asset criteria. Participants do not have to belong to a specific category of the population to qualify for benefits. Thus, the program serves a broader segment of the low-income population than do other income support programs.
- o Benefits and eligibility rules are standard throughout the nation and are based on a recipient's total income (less allowable deductions), including public transfer payments. This has the effect of reducing discrepancies in income or purchasing power across regions due to wage differentials, or across states due to other program policy differences. For example, food stamp recipients who rely on AFDC as a major income source but live in a state that provides less generous AFDC benefits receive higher food stamp benefits on average than similar families who live in states with more generous AFDC programs. In 1984, a typical AFDC family received about 26 percent of its "AFDC plus food stamp" income in the form of food stamps. In states paying below-average AFDC benefits, the corresponding percentage could be much higher. In Mississippi, the state with the lowest average per-family AFDC payments, for example, a typical family received over two thirds of its total assistance income in the form of food stamps.¹
- o The program is responsive to changes in circumstances and need. Eligibility can be determined and benefits paid within a matter of days for certain emergency cases. On average, eligibility and benefit determination occurs in less than a month, faster than any other federal program by a significant margin. Further, in the long term, the program maintains the purchasing power of benefits through periodic cost-of-living adjustments to benefits and the various allowable deductions.
- o Special provisions enhance benefits for groups with special needs, such as the elderly and disabled.

The major criteria for food stamp eligibility are first, gross income below 130 percent of the poverty level for the non-elderly and non-disabled; second, net income below 100 percent of the poverty level for all households;

1. Calculated from data published in U.S. House of Representatives, Committee on Ways and Means, "Background Material and Data on Programs within the Jurisdiction of the Committee on Ways and Means", Committee Print, February 22, 1985.

and third, assets below \$1500 (excluding the value of a residence, a portion of the value of motor vehicles, household effects, and certain other resources.)¹

Gross income as defined by the program includes cash income from all sources, with the exception of a few minor income sources excluded under other federal laws. Net income is calculated from gross income by subtracting certain allowable deductions. These include a standard deduction available to all households (\$95 per month in fiscal year 1985); 18 percent of earned income; dependent care costs incurred because of work or training; and shelter costs exceeding 50 percent of net income (after all other allowable deductions). The total of these last two deductions, however, cannot exceed an inflation-indexed cap, which is now \$134 per month. Households containing elderly and disabled persons may also deduct out-of-pocket medical expenses over \$35 per month, and are not subject to the \$134 cap on the excess shelter deduction.

Benefits are a function of net income and the "maximum allotment" for each household size. The maximum allotment is the benefit that is available to a household with no net cash income. The level of this benefit is determined by the cost of the "Thrifty Food Plan" (TFP), a market basket of food items that reflects a special low cost but nutritionally adequate diet. Maximum allotments, which vary according to household size, are increased periodically to reflect increases in the costs of purchasing the foods included in the TFP. A household's actual benefit is calculated by subtracting 30 percent of countable income from the maximum allotment for its household size.

1. Households of two or more that include at least one elderly person may have liquid assets of up to \$3000.

Thus, for example, a family of three living in Virginia, with no cash income except AFDC, has a gross income equal to their AFDC benefit, which in 1985 is \$327 per month.¹ Their net income, if their housing costs do not exceed 50 percent of their income, is \$327 minus the standard deduction, which is \$95 in 1985, leaving a net income of \$232. Because they have no earnings, such a family is not eligible for either the earned income deduction or the dependent care deduction. Benefits are calculated by subtracting 30 percent of net income, or in this case, \$70, from the maximum allotment for a three-person household, which in 1985 is \$208.² Total food stamp benefits for this hypothetical family, therefore, would be \$138 per month. In 1984, food stamp benefits averaged about \$43 per person per month, or about \$130 for a family of three.

As this example illustrates, food stamp benefit levels are quite sensitive to changes in income from other sources. If the AFDC benefits received by the family in the example above increased by \$10, for example, there would be a compensating reduction of 30 percent of that amount, or \$3, in their food stamp benefits. Similarly, a decline in AFDC benefits would be partially offset by an increase in food stamps. This responsiveness to changes in recipients' incomes means that the costs of the Food Stamp Program as a whole can be affected by changes in benefits in other programs, and by changes in recipients' incomes from other sources. The program is especially likely to be affected by changes in AFDC, since more than three-fourths of AFDC recipients also receive food stamps, and they account for over 40 percent of the food stamp caseload.

1. Virginia has been chosen for this example because its AFDC payment standard for 1985 is at the median for all states.

2. Higher maximum allotments are provided in Alaska, Hawaii, the Virgin Islands, and Guam, to reflect higher food prices in those areas.

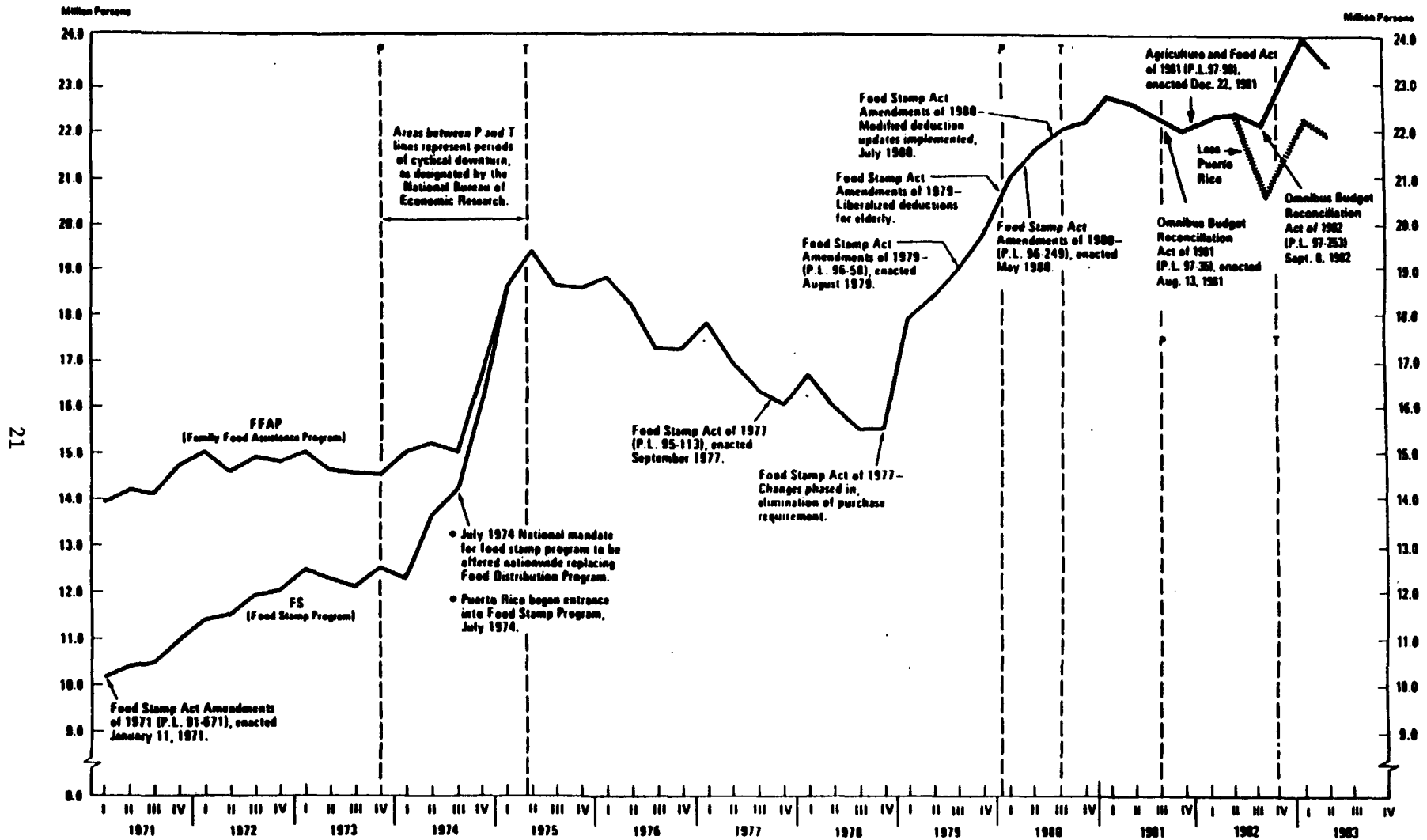
This responsiveness to income changes on the part of the Food Stamp Program also helps to account for the rise and fall in program expenditures in response to economic conditions. During recessionary periods, some employed persons lose their jobs and become eligible for food stamps for the first time, thus increasing both the number of recipients and program expenditures. In addition, some who are already receiving benefits may experience income losses, either because they become unemployed or because their wages or hours of work are reduced. In these cases, as seen above, their food stamp benefits increase, partially compensating for the lost income. In a period of recovery, both benefits and program enrollments decline as incomes rise. This sensitivity to economic circumstances helps to explain some of the fluctuations in the program over time that are discussed in the next section.

Changes in the Number of Food Stamp Recipients, 1971-1984

The first food stamps were issued under pilot projects starting in 1964, but uniform national eligibility requirements were not developed until 1971. The number of participants in the Food Stamp Program grew rapidly in the program's early years, peaking in early 1975. This rise resulted from a combination of geographic expansion in the program, as food stamps became available in all counties of the U.S. and in Puerto Rico, and increases in program participation resulting from the 1973-1975 recession. Between 1975 and 1979, however, there was an economic recovery and enrollments fell fairly steadily, so that by the beginning of fiscal year 1979 the total number of participants was about the same as it had been in the early part of 1974. Since then, enrollments have once again risen, at a rapid rate through early 1981, and then more slowly and with some fluctuations in the 1981-1984 period. Figure 2.1 illustrates these trends in caseload sizes over time.

Figure 2.1

Total Food Stamp Program Participation, 1971-1983



SOURCE: G. William Hoagland, "The Reagan Domestic Food Assistance Policies: Proposals, Accomplishments and Issues", paper presented at the American Enterprise Public Policy Week, December 1983. Based on information prepared by the U.S. Dept. of Agriculture, Food and Nutrition Service.

The very rapid growth rates shown for the Food Stamp Program in the period before 1975 are, in a sense, somewhat misleading. Although the number of food stamp recipients did rise substantially during this period, this rise coincided with the phase-out of the Needy Family Food Distribution Program, a commodity assistance program for low-income families that had been in existence since 1935. This program provided food supplements directly to each family, instead of allowing families to purchase their own food using coupons. Thus, the total number of low-income families receiving food assistance did not grow as much in the 1971-1975 period as the food stamp participation figures alone would imply.

The line labeled "FFAP" in Figure 2.1 shows the total number of persons participating in food assistance programs over this period, compared to the number participating in the Food Stamp Program.¹ As the diagram illustrates, food stamps accounted for a growing share of all food assistance to families over this period, until by 1975 the Food Distribution Program had been effectively phased out. The total number of persons receiving food assistance, however, actually grew relatively little, especially between 1971 and 1974. Between the middle of 1974 and the middle of 1975, there was a sharp rise, but it was followed by a substantial decline in 1975-1976.

To some extent, therefore, the rapid rise in participation seen from early 1979 through the beginning of 1981 represents a larger increase in the total number of people receiving some type of food assistance than does the earlier expansion. From the start of fiscal year 1979 through March 1981,

1. These estimates include only food assistance provided in the form of food stamps or food commodities for home consumption. They exclude aid provided through the School Lunch Program, the School Breakfast Program, and other institutionally based food assistance programs. They also exclude aid provided through the Special Supplemental Food Program for Women, Infants and Children (WIC).

total participation in the Food Stamp Program rose from about 13.7 million persons to about 21.2 million--an increase of almost 55 percent.

Several different factors probably contributed to this increase, including rising unemployment rates and a series of rapid food price increases. The major factor, however, especially in accounting for the early part of the increase, was probably the implementation of a set of legislative changes enacted in 1977 (the Food Stamp Act of 1977, P.L. 95-113). The most important of these changes for program participation was the elimination of the purchase requirement for food stamps, which occurred in January 1979.

Before this change, participants obtained stamps by exchanging cash for a predetermined allotment. Since the total value of the stamps exceeded the cash payment, the participant received a net benefit equal to the difference between the two amounts. With the elimination of the purchase requirement, participants received only the net benefit and no longer made a cash payment. Thus, although the total benefit available to a given family did not change substantially, the cash outlay required to take advantage of the benefit was eliminated.¹ The effect of this change was to increase participation in the program by almost 10 percent in fiscal year 1979. In fiscal year 1980, the changes in the program, in conjunction with a recession in the economy, induced an increase of almost 20 percent in the number of food stamp recipients.²

Concern about the pattern of growth in the program prompted legislation in both 1979 and 1980 (P.L. 96-58 and P.L. 96-249) to eliminate semiannual benefit adjustments for food price inflation--substituting instead an annual

1. Other changes included in the 1977 Act, however--notably, the introduction of standardized deductions from gross income--did have some impact on total subsidies.

2. Estimates from Food and Nutrition Service, "Interim Report to Congress," May 1984, page 4.

adjustment--and to reduce slightly the income and asset ceilings for the program. Since then, total growth in the number of food stamp participants has slowed considerably, especially since the beginning of 1981.

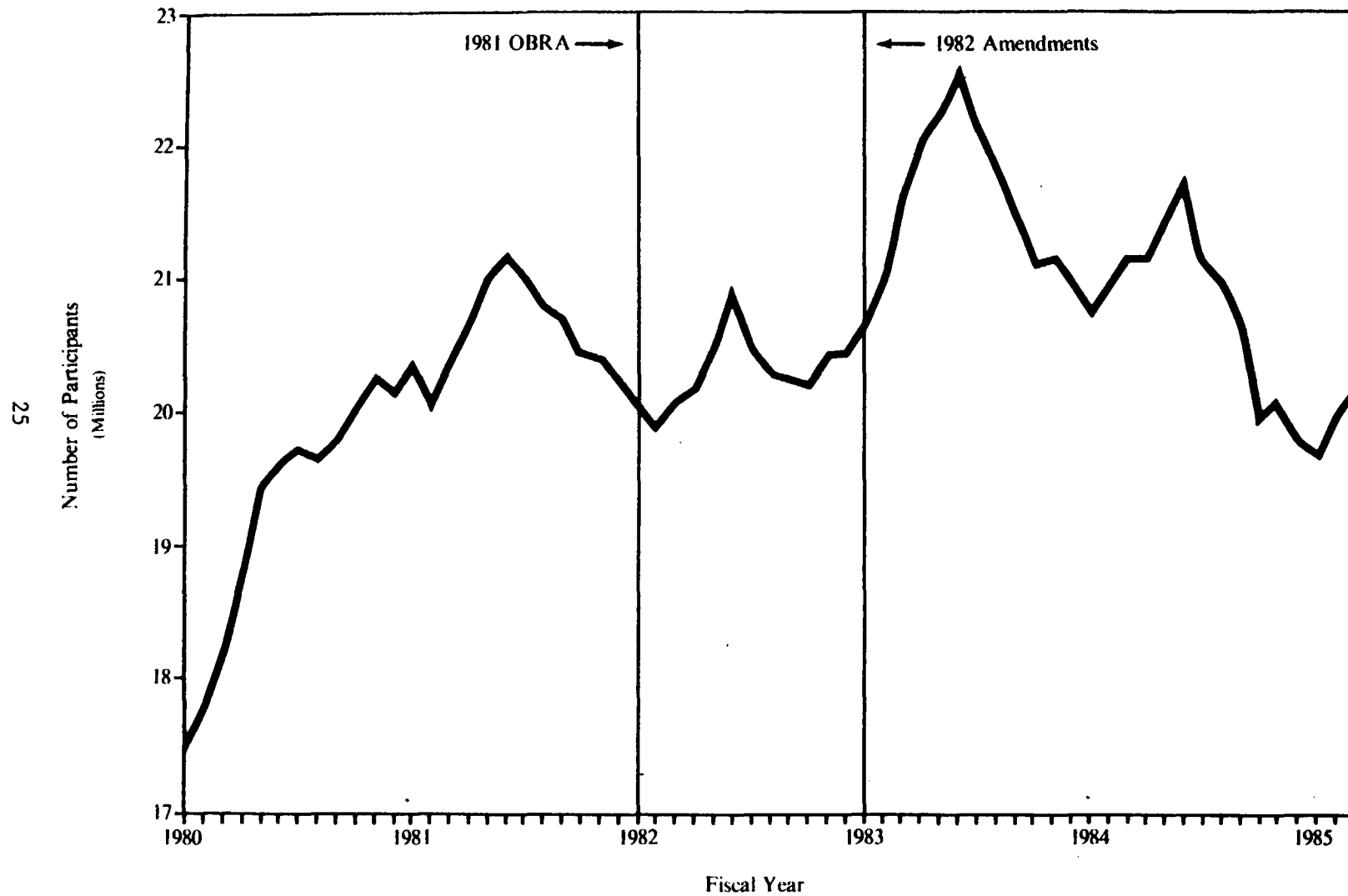
The impacts of the additional legislative changes enacted in 1981 and 1982 to improve program targeting and reduce program growth are the major topic of this report, and these changes will be examined in detail in the next chapter. In general, as Figure 2.2 indicates, there is a small but discernible upward trend in participation over the 1981-84 period, with some substantial variations in participation over the time period. These variations are attributable both to the response of the program to economic cycles and also, to some extent, to seasonal fluctuations in incomes and participation. The program reached a peak participation of 21.2 million people in March 1981, and then declined fairly rapidly to about 19.9 million by November of that year. A second major peak, of about 22.6 million, was reached in March 1983, and was also followed by a fairly rapid decline. By April of 1984 total participation stood at about 21.2 million, or almost exactly the level of the 1981 peak. Participation declined slightly more over the remainder of 1984, and reached about 20.2 million in December. The specific causes of these relatively smaller fluctuations in total participation will be discussed further in the body of this report.¹

It is important to note, however, that the pattern seen in the period from 1981-84 does not imply that the legislation of 1981-82 had a dramatic negative impact on caseloads. Figure 2.2 shows that the decreases in caseload

1. The participation figures shown here and elsewhere in this report (except Figure 2.1) exclude food stamp recipients in Puerto Rico. The costs of providing benefits to Puerto Rican participants are also excluded from program spending totals. Since July 1982, low income persons in Puerto Rico have received assistance through the Puerto Rico Nutrition Assistance Program rather than through the Food Stamp Program.

Figure 2.2

**Number of Food Stamp Participants,
1980-1985**



Source: U.S.D.A. Food and Nutrition Service, Monthly Summary of Operations

in the period after OBRA implementation actually were an extension of a downward trend that began in the middle of fiscal year 1981. Furthermore, two points should be kept in mind with respect to expected increases because of the 1981-82 recession. First, comparisons to food stamp caseload behavior in the two previous recessions of 1973-75 and 1980 are difficult to make because those recessions occurred during dramatic expansions of the program. As shown in Chapter I of this report it is difficult to isolate the economic response of recipients from the policy response. Second, as will be argued in Chapter V of this report (on the economy), the recession of 1981-82 was very different in several ways from the two previous recessions, partially because prices were behaving differently and partially because unemployment was significantly higher at the start of the 1981-82 downturn. These issues will be discussed in greater detail later in the report.

Changes in Recipient Income and Caseload Composition, 1971-1984

While the number of food stamp recipients is an important measure of overall program change, the composition of the recipient population is also an important element in understanding the program. Composition can be a significant determinant of both the size of the effects of legislative changes and the kinds of households that are likely to be impacted. An independent trend toward less households with earnings, for example, will minimize the impact of changes in earnings deductions.

The results of this study show that there was a slight decrease in the percentage of food stamp households with earners between 1981 and 1984, a more marked decrease in the percentage with elderly and a very small increase in the percentage receiving AFDC benefits. The percentage below the poverty line fluctuated but remained very high. Most of these changes are part of trends that began before 1981 and were not the result of the legislation of 1981-82.

Table 2.1 shows selected characteristics of the food stamp caseload from 1973 through 1983. Several major long-term trends emerge from this table. These have to do both with recipient incomes, which is partially a caseload composition issue, and with the overall demographic makeup of the caseload.

Recipient Incomes. Perhaps the most striking trend that appears in Table 2.1 is the increasing proportion of the caseload with incomes below the poverty level. In September 1975, slightly more than three-fourths of food stamp recipients had gross incomes that were below 100 percent of the poverty level. By 1976, the proportion with below-poverty incomes was up to 82 percent, and by 1980 it had risen to 93 percent. There was another slight rise between August 1981 and August 1982, when it reached 95 percent, but preliminary data for 1983 indicate that the percentage below poverty was once again 93 percent in that year. Trends for the 100-125 percent (or, in later years, 100-130 percent) of poverty group and the group with incomes over 125 percent of the poverty level have followed comparable patterns. These data indicate that the proportion of higher income families participating in the program was declining fairly sharply even before the enactment of the 1981 legislation.

This trend in total incomes is also reflected in the composition of incomes. The most notable composition trend is the steady decline in the proportion of households with earnings over the past decade. By the beginning of 1983 the proportion of households in the sample with reported earnings had fallen to only about 16 percent--well below the 24 percent reported for 1975. This implies that any changes in policy which affected primarily those households with earnings would diminish over time if temporal trends continued. The legislation of 1981-82 may have reinforced the downward trend

Table 2.1
CHARACTERISTICS OF THE FOOD STAMP CASELOAD, 1971-1982

	Survey Date:										
	1973 (May)	1974 (July)	1975 (July)	1975 (Sept)	1976 (Sept)	1978 (Feb)	1979 (Nov)	1980 (Aug)	1981 (Aug)	1982 (Aug)	1983 (Feb)
Percent of Households with Gross Income as a Percentage of the Poverty Level:											
Below 100%		87		77	82	83	82	93	93	95	93
100% - 125%				13	11	11	14 ^a	6 ^a	6 ^a	5 ^a	7 ^a
Over 125%				9	7	6	4 ^a	1 ^a	1 ^a	-- ^a	-- ^a
Percent of Households with Earnings:	27	28	29	24	21	19	20	19	18	17	16
Percent of Households with Public Assistance Income:											
All Types ^b	66	64	60	64							
AFDC				42	43	43			40	43	44
Percent of Households with Female Heads:	59	60	58	65	68	69	69	69	70	70	
Percent of Households with Elderly:											
Head 65 or over	24	21	17	17	16	16					
Any Member 60 or Over				22 ^c			24	23	21	20	18
Mean Household Size	3.2	3.3	3.5	3.2	3.0	3.0	2.7	2.8	2.8	2.8	3.0

SOURCES: May 1973, July 1974, and July 1975--Data derived from supplements to the U.S. Bureau of the Census' Current Population Survey, and published in "Characteristics of Households Purchasing Food Stamps," Current Population Reports, Series P-23, No. 61, July 1976. September 1975, September 1976, February 1978 and November 1979--Data from surveys of the characteristics of food stamp households carried out and published by the USDA. Other Surveys--Based on data abstracted from samples of the food stamp case records and published by the U.S. Department of Agriculture, Food and Nutrition Service (1982 data released in mimeograph form only). 1981 and 1982 figures based on analyses of these data performed by The Urban Institute. 1983 figures are preliminary estimates. See text for more details.

NOTES: Blank cells indicate data are not available. -- indicates less than 0.5 percent. In some cases, totals may not sum to 100 percent because of rounding error.

a. For 1979-83 surveys, percentages shown indicate the proportion of households with incomes between 100% and 130% and over 130% of the poverty line, respectively.

b. Includes AFDC, General Assistance, and means-tested aid to the aged, blind and disabled.

c. Represents heads 61 and over.

in earners, therefore, but did not create it and apparently did not accelerate it.

Unlike the proportion of households with earnings, the proportion receiving Aid to Families with Dependent Children (AFDC) or other public assistance seems to have changed relatively little over time. A small decrease in the proportion of AFDC recipients, from about 43 percent to about 40 percent of the total caseload, was seen between 1978 and 1981. The proportion rose again to 43 percent in 1982, and is 44 percent in the preliminary 1983 data. Although categorical eligibility of AFDC recipients for food stamps was ended in 1979, most AFDC recipients still qualify for food stamp benefits, and program data from AFDC and food stamps indicate that between 75 and 80 percent of AFDC recipients have received food stamps in most years since 1975. This shows why changes in AFDC policy can have a significant effect on the nature of the Food Stamp Program.

Overall Demographic Composition. In addition to the income source changes seen for food stamp recipients in the last decade, there have also been some changes in the general demographic make-up of the caseload.¹ In spite of the general upward trends in the number of female headed households in the population as a whole, for example, the rise in the proportion of food stamp households with female heads has been much less marked. This stability, however, is consistent with that of the AFDC caseload which consists largely of female-headed families.

One major long-term demographic trend is the decline in the proportion of elderly persons on the rolls. Comparisons across time are somewhat complicated by definitional changes across samples; the definition of an

1. These changes are discussed more thoroughly in Chapter IV of this report.

"elderly household" has changed from "head of household age 65 or over" in the 1971-1979 period, to "any member age 60 or over" in the 1980-1983 samples. Nevertheless, within each set of surveys with a consistent definition, a continuous declining trend may be observed. Between 1973 and 1978, the proportion of households with a head 65 or over fell from about 24 percent to about 16 percent. This decline continued in the 1979 to 1983 period; in 1979, the proportion of food stamp households with a member aged 60 or more was 24 percent, and by 1983 it had fallen to about 18 percent.

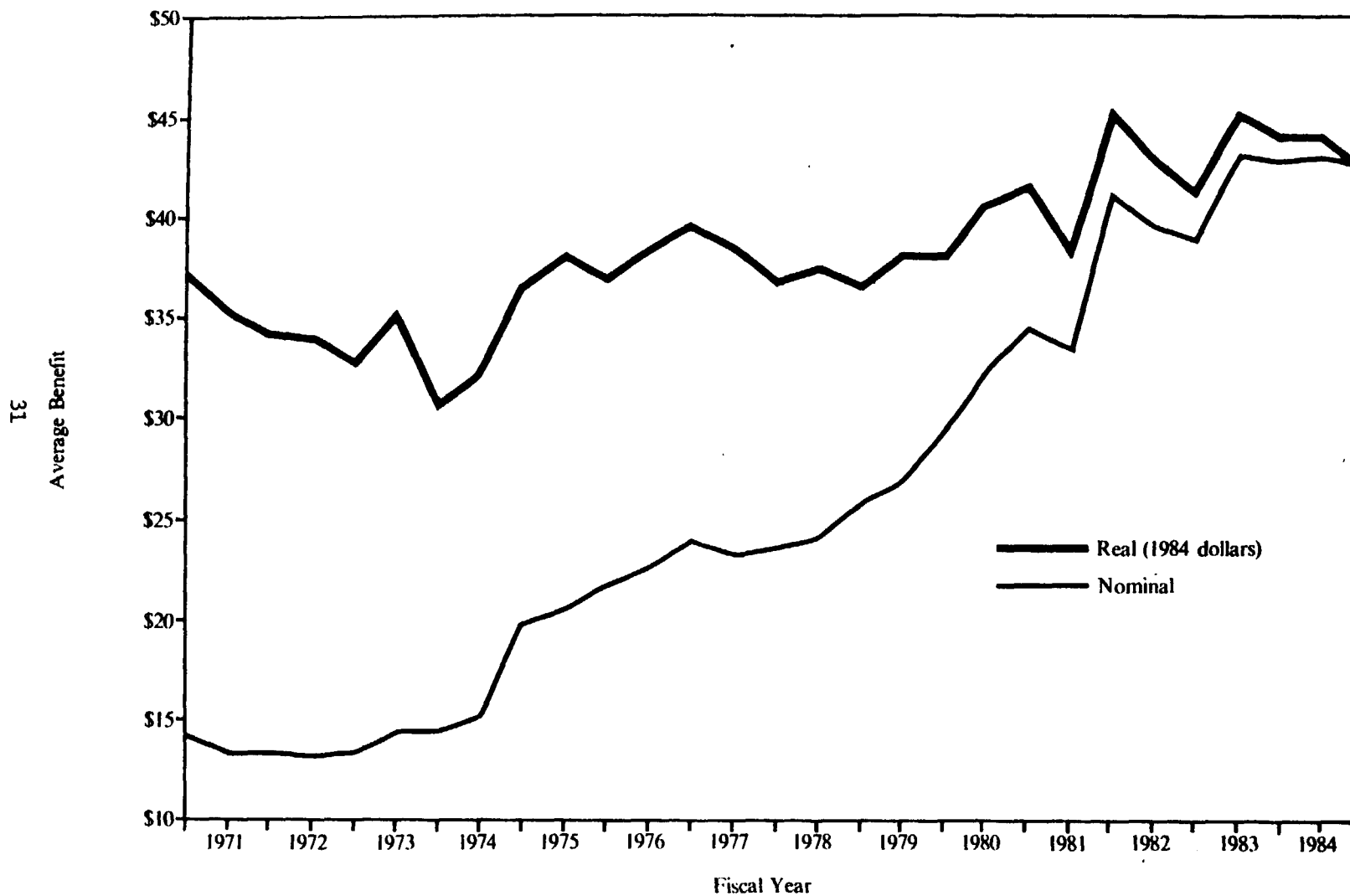
It seems likely that at least part of the explanation for this trend among the elderly on food stamps lies in the general decline in poverty rates for the elderly over the past 15 years. In 1970, almost 25 percent of those aged 65 and over had below-poverty level incomes. By 1983, in contrast, only about 14 percent of those aged 65 and over were poor.

Changes in Food Stamp Benefit Levels, 1971-1984

The changes in caseload composition and in recipients' incomes described above are important, but average benefit level changes also have some important implications for food stamp costs. Average benefit levels in the Food Stamp Program have risen steadily, at least in nominal terms, over most of the past decade, as Figure 2.3 shows. In part, this is a result of cost of living adjustments, which were made annually between 1971 and 1974, and semi-annually between 1974 and 1979. Since 1979, adjustments have again been annual, except for the delays instituted under the 1981-1982 legislation. In the early 1970s, average nominal benefits per person were fairly constant for several years, and were generally between about \$13.50 and \$14.50. At the beginning of fiscal year 1974, however, average nominal benefits started to rise fairly rapidly, going from about \$15 to almost \$23 by the end of 1975, and reaching almost \$35 by the beginning of 1980. During 1980, average

Figure 2.3

**Average Food Stamp Benefits,
Nominal and Real Dollars, 1970-1984**



Source: Calculated by The Urban Institute from U.S.D.A. Food and Nutrition Service, Monthly Summary of Operations

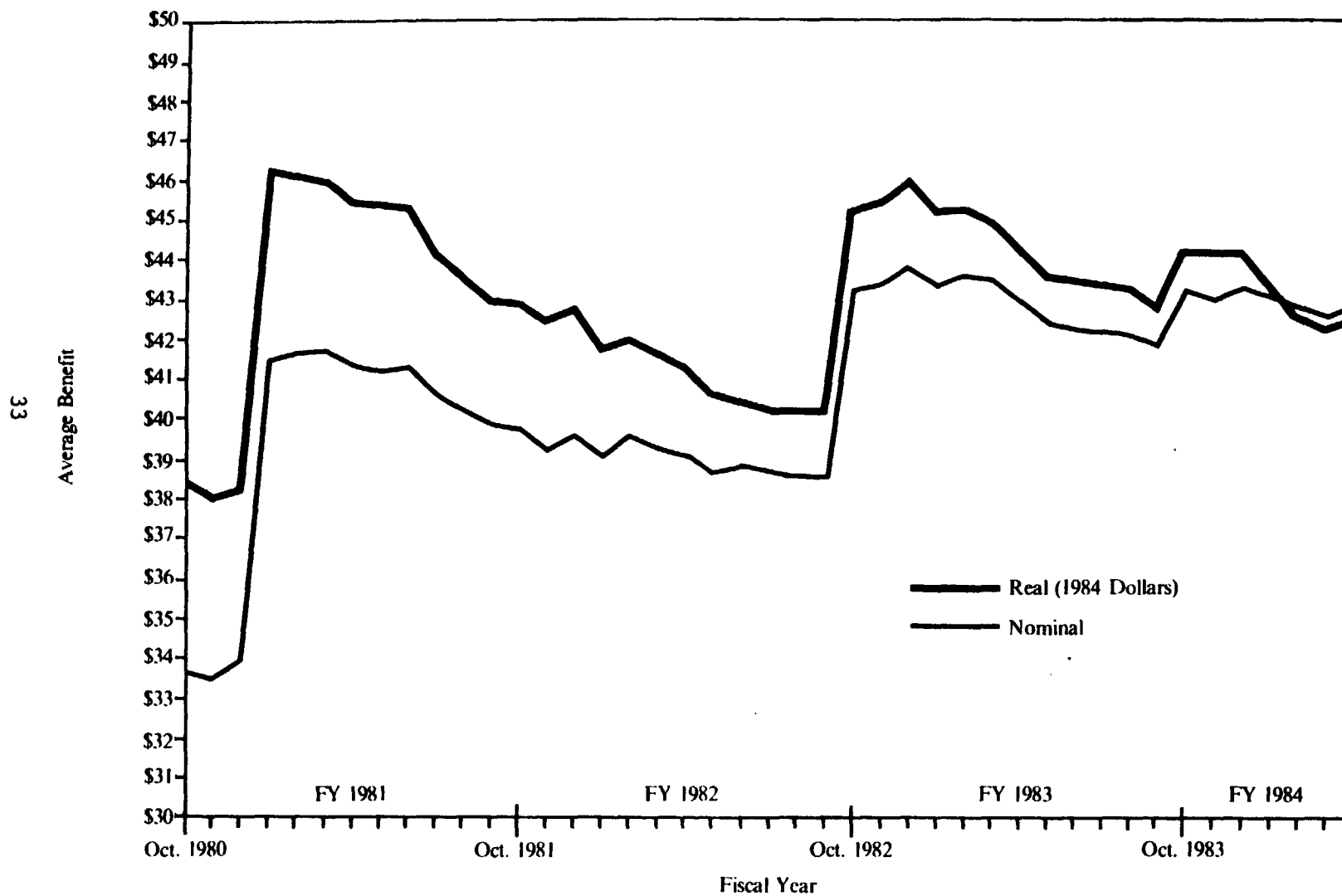
nominal benefits fell slightly, but then jumped fairly sharply in January 1981, when the maximum allotment was adjusted for increases in the price of food, bringing average nominal benefit levels to about \$41 per person. The same pattern of slow decline in average benefits occurred after this jump, until the next cost of living adjustment in October 1982, when average nominal benefits again rose fairly sharply to more than \$43 per person. Since that time, nominal benefits have remained fairly constant on average, with a small decline at the end of fiscal year 1983.

The pattern seen for average nominal benefits over the past decade, then, is one of almost continuous increases, with occasional small declines between adjustments in the maximum allotment. In real terms, however, average benefits have risen much less, although the overall trend is still upward. Figure 2.3 also shows average benefits per person since 1970 in 1984 dollars.¹ In real terms, as can be seen, average benefits actually declined between mid-1970 and mid-1973, from about \$37 in 1984 dollars to about \$30. By the beginning of fiscal year 1975, average real benefits per person had risen again, to about \$39 in 1984 terms, and they stayed at approximately this level through fiscal year 1979. In 1980 through 1983, the average real value of food stamp benefits experienced much the same type of fluctuations as did average nominal benefits. These fluctuations, and especially, the impacts of cost of living adjustments, can be seen even more clearly in Figure 2.4, which traces average benefits per person, in both nominal and real terms, on a month by month basis for the most recent period.

1. Benefits amounts have been adjusted to 1984 dollars using the Consumer Price Index for food price changes over the relevant period. These "real" 1984 dollars thus reflect the purchasing power of benefits in terms of food that could be purchased, rather than in terms of consumption goods in general.

Figure 2.4

Average Food Stamp Benefits
Nominal and Real Dollars, October 1980 - April 1984



Source: Calculated by The Urban Institute from U.S.D.A. Food and Nutrition Service, Monthly Summary of Operations

In sum, then, nominal benefit increases have been substantial over the past decade, and have helped to increase total spending levels for the Food Stamp Program. In real terms average benefits have been increasing but at a slower rate over time. Adjustments for changes in food prices do cause benefits to rise fairly sharply when they first go into effect, but this impact gradually erodes with time, and real benefit levels begin to decline until the next cost of living adjustment. Real benefit levels have changed very little, on average, over the past four years, although there have been some fairly large month to month fluctuations.

Conclusion

The long-term and recent patterns of food stamp program variables reinforce the general notion that the permanent changes contained in the 1981-82 legislation probably did not have a significant impact on the characteristics or income of food stamp recipients, nor on the number of recipients or average benefits in the Food Stamp Program. In order to confirm the implications of the historical data, the current study undertook a more systematic and controlled examination of the available evidence. The next chapter is devoted to a discussion of those findings.

Chapter III

Impacts of the Legislation of 1981-1982 on the Food Stamp Program

The major purpose of this study was to estimate the independent effects of the 1981 and 1982 legislative changes and other factors--especially, unemployment rate changes--on the Food Stamp Program in the 1980-1983 period. About two-thirds of the cost savings associated with these changes were expected to come from a small number of provisions affecting benefits and eligibility and it is on these provisions that the analyses in this report focuses.¹ For the most part, it is not possible to separate the specific effect of each provision since many of the changes were implemented simultaneously. In many cases, therefore, increases or decreases in benefits from one month to the next were the net result of several provisions. Therefore, this study treats the legislation of 1981 and 1982 as a package.²

The general approach taken in this study was to examine changes in the Food Stamp Program in the periods prior and subsequent to the implementation of the legislation. The purpose of this approach was to concentrate on what actually happened to the number of recipients and to their income and average benefits in the 1981-83 period. Some previous analyses have looked at these issues somewhat differently by comparing what did happen in, say 1982, with what might have happened in 1982 in the absence of the legislative changes.

This is a useful and widely accepted approach among analysts, particularly when actual data are unavailable, but it has certain drawbacks.

1. The rest of the legislative changes were expected to result from administrative provisions, including the substitution of a block grant for the Food Stamp Program in Puerto Rico.

2. One specific provision, the proration of benefits in the month of application, can be analyzed from the new case record survey separately since it affects new recipients exclusively.

In particular, the comparison to a "what might have happened" world requires the assumption that there is no change in people's behavior in response to policy changes, an unlikely event. Furthermore, it is generally true that individuals assess their own well-being relative to their income or benefit last month rather than relative to what it "would have been" this month. While this study includes a simulation of the Food Stamp Program as it might have looked (which, incidentally, confirmed the general conclusions of this study), the results presented in this report are for the most part drawn from analyses of actual changes from month to month or year to year during this period.

The findings of this study imply that, as a package, the legislation of 1981-1982 had a considerably smaller impact on both average benefit levels and caseload size than had been expected. Holding constant all other factors, the legislative changes of 1981 and 1982:

- o Probably reduced total caseloads by a small amount, in the range of 1 to 2 percent of all cases in 1982;
- o Reduced average benefit levels by a small amount relative to what they were prior to the implementation of the legislation, in the range of \$3 to \$4 in nominal terms in 1982; and
- o Reduced total program costs by about \$450 to \$650 million in fiscal year 1982, relative to prior levels.

These findings, which in most cases have been confirmed in two or more of the analyses outlined in Chapter I, are discussed in detail below. In Chapter II, it was shown that aggregate costs, caseload composition and benefit levels in the Food Stamp Program generally continued their historical patterns in the 1981 to 1984 period. This chapter will specifically examine the legislation of 1981 and 1982 to determine whether the general food stamp data mask the precise impacts of that legislation. The first section summarizes the major provisions of the legislative changes and specifically identifies those which

were temporary and those which were more permanent. The remainder of the chapter reviews changes in program variables in the 1981-1984 period and describes in detail the specific analyses of the legislative impacts on caseloads, benefit levels and total costs, respectively.

Legislative Changes Enacted in 1981 and 1982

Three pieces of legislation enacted by the 97th Congress in 1981 and 1982 made changes in the Food Stamp Program: the Omnibus Budget Reconciliation Act of 1981 (OBRA), the Food Stamp and Commodity Distribution Amendments of 1981, and the Food Stamp Act Amendments of 1982.

These pieces of legislation made a series of changes--some permanent and others only temporary--in program eligibility and benefit determination rules. Those changes designed to be permanent for the most part affected eligibility for the program and benefit determinations for certain sub-groups of recipients, such as new beneficiaries. With the exception of changes in program rounding rules, most of these permanent changes affect a relatively small number of recipients in any given month.

In addition to these permanent changes to the program, a series of across-the-board delays in cost of living adjustments (COLAs) for benefits and for deductions from gross income were also enacted. Unlike the permanent changes, these changes affected benefits for almost all recipients.¹ For the most part, however, these changes were temporary; "catch-up" adjustments made in fiscal years 1983, 1984 and 1985 brought maximum allotments back to approximately the levels they would have attained without the delays. Maximum allowed deduction levels were also increased, in October 1983 and October 1984, but deductions remain lower than they would have been without the

1. The only exceptions were the households receiving the \$10 minimum benefit.

changes enacted in 1981-1982. Both the permanent and temporary changes are discussed in more detail below.

Permanent Changes. Although more than 95 different changes were enacted in the Food Stamp Program under these three acts, the bulk of these were changes to administrative procedures and were not expected to affect either eligibility for the program or program benefits. Among the permanent changes that did affect eligibility and benefits, five major changes account for most of the expected savings, as well as for the major program impacts. These five permanent changes were:

- o A revised income test for households without elderly or disabled members, requiring them to have gross income below 130 percent of the poverty line in order to qualify for benefits;
- o A reduction in the earnings deduction allowed, from 20 percent to 18 percent of earned income;
- o The prorating of the first month's benefits for new recipients, according to the date on which they applied;
- o The repeal of previously scheduled increases in the dependent care and medical deductions; and
- o The implementation of new rounding rules.

In addition to these relatively major changes, other changes having to do with the eligibility of certain special groups (for example, students, strikers and borders), accounting period and reporting requirements, and a few other issues were also made. Table 3.1 summarizes the major changes in the program, both permanent and temporary.

Of the permanent changes listed above, the one with the most important effect on eligibility for the program was the introduction of the new gross income screen. Prior to OBRA, there had been a net income screen for eligibility at 100 percent of the poverty level. This income test had applied to all households, not just those with no elderly or disabled members.

Table 3.1
SUMMARY OF SIGNIFICANT FEDERAL LEGISLATIVE CHANGES IN THE FOOD STAMP PROGRAM:
JANUARY 1981 THROUGH DECEMBER 1983

Provision	Prior Law	December 1983 Law	Legislation
Eligibility test for non-elderly/disabled household	net income 100% of poverty	gross income 130% of poverty; and net income 100% of poverty	1981 OBRA; 1982 Food Stamp Amendments
Deductions from income: Standard deduction	updated each January; rounded to nearest \$5	update postponed from January 1982 to October 1983; updated each October, rounded to lower \$1	1981 OBRA and 1982 Food Stamp Amendments
Dependent care/ excess shelter deduction for non-elderly/disabled	subject to cap updated each January; cap rounded to nearest \$5	cap update postponed from January 1982 to October 1983; updated each October; cap rounded to lower \$1	1981 OBRA and 1982 Food Stamp Amendments
Separate dependent care deduction	to be effective October 1981	repealed prior to implementation	1981 OBRA
Earned income	20% of earned income deductible	18% deductible	1981 OBRA
Excess medical costs of elderly/disabled	monthly costs over \$35; to be costs over \$25 as of October 1981	monthly costs over \$35 (change to \$25 repealed prior to implementation)	1981 OBRA
Maximum Allotment	updated each January based on projected cost of Thrifty Food Plan; rounded to lower \$1	update postponed from January 1982 to October 1982; updated each October based on 99% of cost of Thrifty Food Plan*	1981 OBRA; 1981 and 1982 Food Stamp Amendments
Initial benefits	full monthly benefit	prorated to application date; no benefit <\$10	1981 OBRA; 1982
Accounting and reporting period for eligibility	Calculated prospectively; rounded to nearest \$1	Calculated retrospectively; rounded to lower \$1; earners and potential earners must report monthly (mandatory implementation delayed until January 1984 under subsequent legislation)	1981 OBRA; 1982 Food Stamp Amendments
Eligibility of special groups:			
boarders	eligible	ineligible	1981 OBRA
strikers	eligible	eligible only if eligible immediately prior to strike	1981 OBRA
children living with non-elderly/non-disabled parents	may file separately	must file as one household	1981 OBRA
non-elderly/non-disabled siblings	may file separately	must file as one household	1982 Food Stamp Amendments
college students	eligible if head of household or spouse of head, or participant in federal work/study program, WIN, or part-time work (at least 20 hours per week)	eligible only if working part-time (at least 20 hours per week); participating in federal work/study; responsible for a child <6; or if on AFDC	1982 Food Stamp Amendments

*Public Law 98-473 returned the basis for adjustment to 100 percent of the cost of the Thrifty Food plan effective November 1984.

Because it was based on net income, however, it allowed some households with relatively high incomes and large deductions to qualify for food stamps.¹ Under OBRA, the net income screen was eliminated in October 1981 for households with non-elderly and non-disabled members, and the gross income test was substituted for these households. Under the gross income screen, higher income households, even those with large deductions, can not qualify for benefits. In addition, the net income eligibility test was reinstated for all households in October 1982, under the 1982 Amendments.

The remainder of the permanent changes enacted in 1981-1982 primarily affected deductions and benefits. The first of these changes, prorating benefits for new participants, was enacted under OBRA. Prior to this change, new participants received a full month's benefit in their first month on the program, regardless of the date on which they applied. Under the new rules, the benefits of households applying after the beginning of the month are adjusted to reflect the number of days remaining in the month, so that those applying at the beginning of the last week of the month, for example, receive a week's worth of benefits rather than an entire month's.

OBRA also repealed a provision to base allotment amounts on projected rather than retrospective food costs and retracted changes to two deductions that were enacted in the 1980 amendments to the Food Stamp Act but not yet implemented. One deduction change would have created a separate deduction for dependent care expenses up to \$90. The other change would have lowered the threshold for the medical expense deduction from \$35 to \$25. Because these three provisions were repealed before implementation, the effect was to

1. It is worth noting, however, that in 1980, before the imposition of the gross income screen, only 1 percent of food stamp households had gross incomes over 130 percent of the poverty level, implying that few higher income households were qualifying under the net income screen then in place.

prevent increases in food stamp benefits for some households rather than to reduce existing benefits.

The 1982 Amendments revised the rounding rules used when computing food stamp benefits and updating maximum allotments, the standard deduction, and the maximum dependent care/excess shelter deduction. These calculations are now rounded down to the next lower dollar. Before the change, food stamp benefits and the maximum allotments were rounded to the nearest dollar, and the deductions were rounded to the nearest \$5.

Temporary Changes. The temporary changes to benefit adjustments and to deductions were somewhat more complex, because some of the adjustments changed in OBRA were altered again in the Farm Bill, and in some cases further changes were made in the 1982 Amendments. On balance, however, the delays in benefit and deduction adjustments enacted as a result of the three pieces of legislation together were as follows:

- o The maximum allotment adjustment originally scheduled to take place in January 1982 was postponed to October 1982 and based on 99 percent of the cost of the Thrifty Food Plan;
- o The increase in the standard deduction from \$85 to \$95 that had been scheduled to take place in January 1982 was postponed to October 1983, and the reference period for the update was changed, resulting in a smaller increase, to \$89;
- o The increase in the cap for the excess shelter/dependent care deduction from \$115 to \$130 that had been scheduled to take place in January 1982 was also postponed to October 1983, and the reference period was also changed, resulting in a smaller increase, to \$125.

The series of alterations to the maximum allotment and deduction adjustment schedules enacted in the three pieces of legislation are summarized in Figures 3.1 and 3.2. The deduction changes do not depend on household size; the level of the maximum allotment varies with household size, but the enacted changes for all household sizes were analogous to the effect shown for a four-person household in Figure 3.1.

Although some of the permanent changes reduced benefits relative to what they would have been for some groups, the temporary changes had a much broader impact on benefits for the food stamp recipient population as a whole, at least in the first year after implementation. These temporary changes had their major impacts in fiscal year 1982, and, to a lesser extent, in 1983. As Figure 3.1 indicates, for example, the maximum allotment for a four person family would have risen from \$233 per month to \$246 per month in January 1982 under the pre-OBRA adjustment schedule. Instead there was no increase until October 1982, when the maximum allotment for a four person family was raised to \$253. During and subsequent to fiscal year 1983, however, maximum allotment levels were actually somewhat higher than they would have been under the pre-OBRA law. The restoration of maximum allotment levels equal to 100 percent of the costs of the Thrifty Food Plan (instead of 99 percent as under the 1982 Amendments) in November 1984 brought maximum allotments back to the level that they would have attained under OBRA and the Farm Bill. The maximum for a four person family is now \$264.

Unlike maximum allotment levels, deduction levels are still somewhat lower than they would have been under prior law, largely as a result of changes in the reference period on which adjustments are based. The deduction changes had their greatest impact in fiscal years 1982 and 1983, however. Under pre-OBRA law, the standard deduction would have been raised from \$85 to

Figure 3.1

MAXIMUM FOOD, STAMP ALLOTMENT FOR A
FAMILY OF FOUR UNDER ALTERNATE ADJUSTMENT SCHEDULES

	October 1980 January 1981	October 1981 January April 1982 1982	October 1982 January July 1983 1983	October 1983 January 1984	October 1984 January 1985
Pre-OBRA ^a	→ \$233	→ \$246	→ \$250	→ \$256	→ \$265
Post-OBRA	→ \$233	→ \$246	→ \$255	→ \$264	→ \$264
Post-Farm	→ \$233	→ \$256	→ \$257	→ \$264	→ \$264
Post 1982 Amendments	→ \$233	→ \$253	→ \$253 ^b	→ \$261 (\$264 in November 1984)	

SOURCE: Food and Nutrition Service, USDA.

NOTES: a. The adjustments in January 1982, 1983, and 1984 were to be based on the projected cost of the Thrifty Food Plan in the previous December. It is not clear how this projection would have been made. Consequently, the actual cost of the Thrifty Food Plan in each December is shown here.

b. An adjustment was made effective October 1983 but a combination of small price increases and rounding rules left the allotment amount unchanged.

Figure 3.2

VALUE OF STANDARD DEDUCTION AND DEPENDENT CARE/
EXCESS SHELTER CAP UNDER ALTERNATIVE ADJUSTMENT SCHEDULES

	October 1980	October 1981	October 1982	October 1983	October 1984
	January 1981	January 1982	January 1983	July 1983	January 1984
Standard Deduction					
Pre-OBRA	→ \$85 →	→ \$95 →	→ \$100 →	→ \$105 →	→ \$110 →
Post-OBRA	→ \$85 →			→ \$90 →	→ \$95 →
Post 1987 Amendments	→ \$85 →			→ \$89 →	→ \$95 →
Excess Shelter/ Dependent Care Deduction					
Pre-OBRA	→ \$115 →	→ \$130 →	→ \$140 →	→ \$140 →	→ \$150 →
Post-OBRA	→ \$115 →			→ \$125 →	→ \$135 →
Post 1982 Amendments	→ \$115 →			→ \$125 →	→ \$134 →

SOURCE: Food and Nutrition Service, USDA.

\$95 in January 1982, and to \$100 in January 1983. Instead, the standard deduction remained at \$85 until October 1983, when it was raised to \$89. Similarly, the cap on the excess shelter/dependent care deduction would have gone from \$115 to \$130 in January 1982 and to \$140 in January 1983 under pre-OBRA law, but instead remained at \$115 until October 1983, when it went to \$125. The standard deduction is now \$95, instead of the \$110 it would have been under pre-OBRA law, while the excess shelter/dependent care cap is \$134 rather than \$150.

Overall, therefore, as these figures demonstrate, the largest impacts of the OBRA and subsequent COLA delays occurred in fiscal year 1982, with smaller effects in fiscal year 1983. Most of the other changes examined in this study were also implemented in fiscal years 1982 and 1983, and their effects should also have been observable in these years. Imposition of a gross income screen at 130 percent of the poverty level and the prorating of the first month's benefits for new recipients, for example, could be expected to have fairly immediate impacts on caseloads and first months' benefits, respectively. The analyses undertaken for this report concentrated on investigating the impacts of these legislative changes in 1982, both because most were implemented in that year and had their largest cost impact then and because data for 1982 is more complete than for later periods. Where possible, however, data for 1983 and later years have also been examined.

Recent Trends and the Legislation of 1981-82

The analysis of historical data on the Food Stamp Program and its recipients in Chapter II revealed five points that are important to keep in mind in assessing the effects of the legislation of 1981 and 1982:

- o The proportion of the caseload with above poverty-level incomes has declined substantially over the past decade from about 22 percent in 1975 to about 5 percent in 1982 and, according to preliminary estimates, about 7 percent

in 1983. Almost all of this decline took place before the enactment of the 1981-82 legislation.

- o The proportion of the caseload with earnings has fallen from 24 percent of food stamp households in 1975 to about 16 percent in 1983. This trend is not new and has been fairly consistent over the last decade. This result is also consistent with the decline in the proportion of the caseload with above-poverty level incomes.
- o The proportion of the caseload with AFDC income has remained relatively stable over time in spite of major changes in state AFDC benefits since 1975 and federal policy in 1981 and 1982.
- o The proportion of the caseload with elderly members has also declined over the past decade. Direct comparisons are difficult because of definitional differences across surveys but there appears to be a steady downward trend in this proportion, which reached 18 percent in 1983. Like the trend in the proportion of earners, this trend does not seem to have slowed or accelerated since the 1981-82 legislation.
- o Average benefits in nominal terms grew steadily through mid-1980. Real benefits have generally moved upward but have sometimes exhibited downward tendencies. Since 1980, real benefit levels have fluctuated somewhat, but most of the major fluctuations appear to be associated with changes in the maximum allotment levels and maximum deductions. When allotment or deduction levels remain constant over time, inflation erodes the real value of benefits. The 1981-82 legislation, because of significant delays in adjustments, magnified their impact on benefit though only until the catch-up adjustments in October 1982.

These historical shifts in recipient incomes, composition and benefits have been occurring for some time and may have underlying causes that are essentially external to the Food Stamp Program and indeed to recent legislative and economic changes. Since the major purpose of this report is to assess the effects of recent program changes, however, it is also important to look closely at key program variables over the past few years. Tables 3.2 and 3.3, for example, show income and benefit levels and various other characteristics of food stamp recipient households since 1981. Many of the

Table 3.2

MEAN INCOME AND BENEFITS OF FOOD STAMP RECIPIENTS
AND SELECTED CHARACTERISTICS OF BENEFICIARIES, 1981-1983

<u>Mean Values, in dollars:</u>	<u>Sample</u>			
	<u>August 1981</u>	<u>February 1982</u>	<u>August 1982</u>	<u>February 1983</u>
Gross Income				
Nominal	349	345	358	376
Real (1984\$)	393	379	381	399
Net Income				
Nominal	196	197	217	208
Real (1984\$)	221	216	231	221
Benefits				
Nominal	103	109	103	127
Real (1984\$)	112	117	109	133
<u>Percentage of Households with:</u>				
Elderly Members (aged 60 or over)	20.9	18.6	19.9	18.1
Children	56.4	58.6	58.0	N.A.

SOURCE: Computed by The Urban Institute from the Quality Control Samples for dates shown. 1983 estimates are preliminary. Some entries may differ slightly from previously published estimates.

NOTES: Real dollars are calculated from the survey month using the Consumer Price Index for all items on income values and the CPI for food on benefit levels.

N.A. indicates not available.

Table 3.3

INCOMES BY SOURCE FOR FOOD STAMP RECIPIENT
HOUSEHOLDS: MEAN AMOUNTS RECEIVED AND PERCENTAGE OF HOUSEHOLDS
WITH INCOME FROM VARIOUS SOURCES, 1981-1983

<u>For Households with Some Income from Source, Average Income From:</u>	<u>Sample</u>			
	<u>August 1981</u>	<u>February 1982</u>	<u>August 1982</u>	<u>February 1983</u>
Earnings	452	422	450	461
AFDC	284	289	292	326
Social Security	282	258	273	303
SSI ^a	181	185	198	205
<u>Percentage with Income from Source:</u>				
Earnings	18.4	17.1	16.9	16.1
AFDC	40.1	44.5	42.6	43.5
Social Security	19.1	18.2	18.5	16.3
SSI ^a	18.7	17.0	18.0	15.1

SOURCE: Computed by The Urban Institute from the Food Stamp Quality Control Samples for dates shown. 1983 estimates are preliminary. Some entries may differ slightly from previously published estimates.

NOTES: a. For 1983 sample, SSI recipients receiving state supplements only are excluded from this category.

above trends can be seen in more detail in these tables. For example, the declining proportions of both earners and elderly persons can be traced across these samples. It should be borne in mind in considering the estimates shown in these tables, however, that small differences in sample means across the samples shown may not be statistically significant.¹

Table 3.2 provides incomes and benefits in both nominal terms and in real, or inflation-adjusted, terms. In general, inflation was relatively low over this period so that the patterns of nominal and real incomes and benefits are the same; when nominal income declines, for example, so does real income. Furthermore, many of the changes, nominal or real, are not significant in a formal statistical sense.

Table 3.2 shows that the experience during the period from 1981 to 1983 largely paralleled historical trends discussed in Chapter II of this report. There has been some small growth in recipients' gross incomes over the past three years. While the change in mean gross income between the August 1981 and August 1982 samples is not significant in a formal statistical sense, the February 1983 value for mean gross income is significantly higher than the earlier values. The increase in mean gross incomes was not reflected in mean net incomes, which rose by about \$20 between August 1981 and August 1982, and then declined slightly in 1983.²

In addition to the changes in real incomes, there were also some changes in incomes from various sources over this period, as Table 3.3 shows. There

1. For the income figures shown, for example, a 95 percent confidence interval would range, in most cases, from about \$5 or \$6 below the estimate shown, to about \$5 or \$6 above. The range for a 99 percent interval would be plus or minus \$7 to \$9. For the sample proportions, a 95 percent interval would generally be plus or minus 1 to 1.5 percentage points, while a 99 percent interval would be plus or minus 1.5 to 2.5 points.

2. The reasons for this difference are related to changes in patterns of deductions occurring between 1982 and 1983.

was a decline in the proportion of households with earnings over the period as a whole. This decline was significant between August 1981 and February 1982. Mean earnings levels for households that had earnings also declined initially, but by August 1982 had risen again to above their 1981 levels. A further small increase in earnings levels occurred in the 1983 sample.

Some fluctuations also occurred in the proportion of households with incomes from other sources, but in these cases the pattern of variation is less clear cut. In general, there was a small upward trend over time in mean amounts of income from each of these sources; the seven percent increase in mean Social Security and SSI benefits seen in August 1982 probably resulted from the July cost of living adjustments (COLAs) in these programs. The twelve percent increase in mean AFDC benefits for those food stamp recipients receiving AFDC between August 1982 and February 1983 is more perplexing. Data from AFDC surveys do not confirm this trend although they do indicate a significant increase in the unearned income of AFDC recipients over this period. This result will therefore require further investigation.

Finally, Table 3.2 indicates that average benefits, in both real and nominal terms, fluctuated in the period from 1981 to 1983. The fluctuations, however, are not generally significant and the pattern probably shows that nominal benefits remained relatively stable and real benefits declined slightly until the cost-of-living increase in October 1982.

There are two important conclusions to draw from this examination of program variables in the period from 1981 to 1983. First, the trends in income, benefits and demographics over this period appear to have had their roots in the pre-1981 period and cannot be attributed to the 1981-1982 legislation. Second, although average real incomes and benefits of food stamp recipients fluctuated between 1981 and 1983, by February 1983 average income

was at least as high in real terms as it had been in 1981 and average benefits were 19 percent higher.

Specific Impacts of the 1981-1982 Legislation on the Food Stamp Program

The recent trends in Food Stamp Program characteristics imply that not much was changed by that legislation of 1981 and 1982. Averages and general program data sometimes conceal important changes in programs, however. This can be a special problem during a period like 1981 to 1984 when policy changes in food stamps were accompanied by changes in the economy, in other transfer programs and in general population characteristics.

In order to isolate and control for the effects of such other factors, it is necessary to use formal statistical and econometric techniques such as regression, simulation and longitudinal analysis. This study undertook several such analyses in an effort to reach a definitive conclusion on the question of whether the legislation of 1981 and 1982 had any significant effects on food stamp recipients.

The remainder of this report provides new evidence on the independent effects of the legislative changes and other factors--especially, economic change--on the Food Stamp Program in the 1980-1983 period. Table 3.4 describes the major findings of the study and the techniques used to reach them. Two points made earlier should be reiterated here. First, the analysis that follows looks at the total effect of all Food Stamp program changes implemented in 1982 and 1983 (with the exception of the Nutrition Assistance Program in Puerto Rico). Because most of the major changes to eligibility and benefit rules were implemented at roughly the same time in many states, it is not possible to estimate the independent effect of each legislative provision separately. Second, the analysis focuses primarily on the effects of these changes in fiscal year 1982 on the grounds that the effect of COLA delays were

Table 3.4

IMPACTS OF THE LEGISLATIVE CHANGES ENACTED IN 1981-1982 ON
FOOD STAMP CASELOADS, BENEFIT LEVELS, AND COSTS IN 1982

<u>Impacts on:</u>	<u>Estimated Effects:</u>	<u>Relevant Analysis:</u>
Caseload Size	Possible small reduction in total caseloads, relative to prior law; in the range of 250,000 to 500,000 persons (1 to 2 percent of total caseload).	Net Flows Model, DRI Model, Case Record Analysis
Benefit Levels	Small reduction in average benefits, relative to prior law; in the range of \$3 to \$4 per household per month in nominal terms (3 to 4 percent of average benefits).	QC Analysis, DRI Model, Case Record Analysis
Total Costs	Reduction of about \$450 million to \$650 million, relative to prior law; savings of about 4 to 6 percent of total program costs. (Excludes costs and savings associated with block grant to Puerto Rico.)	Net Flows Model, DRI Model, Micro-simulation Model

SOURCE: Urban Institute estimates. See text for discussion of methodology and statistical significance of findings.

largest then. To the extent possible, the discussion that follows points out how these estimates might differ in later years. The major findings with respect to caseload size, benefit levels, and total program costs are discussed in the sections that follow.

Caseload Effects. Three separate analyses were undertaken to evaluate the impact that the legislation of 1981 and 1982 had on the number of households and persons on the Food Stamp Program. The net flows model is a pooled cross-sectional time series regression model which attempts to explain the net change in food stamp caseload over time. It employs monthly food stamp aggregate data from 1976-1984 and controls for policy, economic and demographic events through the use of a large set of variables, some of which are produced on a monthly basis, some on a quarterly basis.

The DRI macro model is really a series of models which uses regression analysis to model regional economies in the U.S. A special food stamp caseload model was built to identify the interactions between regional economies and the number of food stamp recipients.¹ While the macro model concentrated on a more specific representation of the economy than the net flows model, it also controlled for policy and demographic variables, though in more general terms.

Analyses of the new longitudinal food stamp case record survey was at this stage confined to standard tabular analysis. The survey was performed by Market Facts, Inc. for The Urban Institute and was based on data abstraction from a nationally-representative sample of food stamp cases. Data collected included all changes in income, benefits or household composition from October

1. This contrasts with the net flows model which evaluated the change in the number of recipients from month to month.

1980 through December 1983 for 6,700 food stamp cases in sixty offices from every region of the country.

The analyses undertaken for this study did not demonstrate any statistically significant impact of the 1981-1982 changes on total food stamp caseloads, although some of the analyses do indicate that there may have been a small impact, in the range of 1 to 2 percent of the total caseload.¹

The model that examines net monthly changes in food stamp caseloads (net flows model) estimates that the impact of the 1981-82 legislation on caseloads was not significant in a formal statistical sense. It did nevertheless estimate that the 1982 legislation decreased average net caseloads by about 900 recipients or 300 households per state per month, independent of all other effects. This essentially means that there were about 44,000 fewer persons on the national Food Stamp Program in each month following the implementation of the 1982 Amendments. On an annualized basis, this would amount to 530,000 persons or about 175,000 households. But it is probable that this impact would not have been sustained over an entire 12 month period. Furthermore, it is also probable that the 1982 estimates picked up lagged effects of the 1981 legislation even though the model attempted to control for each law separately. Most importantly, however, in a formal statistical sense the estimates from the net flows model indicated that OBRA and the 1981 and 1982 Amendments did not have a significant impact on caseloads.

The macroeconomic model used to analyze the Food Stamp Program in the context of the economy as a whole was developed by DRI, Inc. and also uses historical data to model the impacts of OBRA on the Food Stamp caseload. The DRI model uses regional rather than state-level data and concentrates more on

1. For details on the analyses undertaken for this study, see the discussions in Chapter I and in Appendices B through F.

general economic factors and less on program-specific variables. Nevertheless, the results of this analysis are also insignificant with regard to the impact of OBRA in seven of the nine regions examined. The exceptions, both Pacific regions (Pacific Southwest and Northwest),¹ show a decline of about 250,000 persons or about 80,000 households in those regions due to OBRA and the 1981 Amendments.² The DRI model, however, does not find a significant or consistent effect of the 1982 Amendments.

Interestingly enough, both the net flows and the DRI models show a powerful and statistically significant effect of the elimination of the purchase requirement in 1979. This implies that both models would show a significant effect for OBRA and the 1982 Amendments had their impact been comparable to that of the 1979 changes.

The data from the case record survey tend to confirm the findings of the net flows and DRI models. Table 3.5 shows the percentage of food stamp cases enrolling in and leaving the program for selected months prior and subsequent to the implementation of OBRA in October 1981. These percentages are respectively referred to as the "entry rate" and the "exit rate". Together, they determine the net change in the size of the caseload on a month-to-month basis.

If large numbers of households lost benefits as a result of OBRA, an increase in exit rates in the period immediately after implementation would be expected. Similarly, if eligibility restrictions limited program entry for

1. Pacific Southwest region: Colorado, New Mexico, Arizona, Utah, Nevada, California, Hawaii; Pacific Northwest: Montana, Wyoming, Idaho, Washington, Oregon, Alaska.

2. The DRI model estimated the national impact to be a reduction of about 500,000 persons or about 165,000 households, consistent with the net flows model results. But of the 500,000, only half was based on results that were statistically significant.

Table 3.5
PERCENTAGE OF TOTAL CASELOAD ENTERING AND EXITING FROM
THE FOOD STAMP PROGRAM EACH MONTH

JUNE 1981 - NOVEMBER 1983

<u>Month</u>	<u>Percentage of New Entrants (Entry Rate)</u>	<u>Percentage of Leavers (Exit Rate)</u>	<u>Net Change (In Percents)</u>
June 1981	8.1	7.1	+1.0
September 1981	8.4	6.9	+1.5
October 1981 (OBRA implementation)	8.3	7.1	+1.2
November 1981	7.7	6.6	+1.1
December 1981	8.0	6.7	+1.3
June 1982	7.8	6.3	+1.5
July 1982	8.8	6.9	+1.9
August 1982	8.3	5.6	+2.7
September 1982	7.8	7.6	+0.2
October 1982 (COLA "catch-up")	8.3	6.5	+1.8
November 1982	7.8	4.8	+3.0
June 1983	6.0	7.3	-1.3
November 1983	6.7	5.1	+1.6
Mean - Entire Period	7.7	6.5	+1.2
Pre-OBRA Period			
(June 1981-Sept. 1981)	8.7	6.5	+2.2
Post-OBRA Period	7.5	6.7	+0.8
(Oct. 1981-March 1982)			

SOURCE: Survey of Food Stamp Case Records undertaken by The Urban Institute.
Data are preliminary.

potential new participants, a fall in entry rates after implementation could be anticipated.

As the table shows, however, there was virtually no change in the exit rates from the program during this period. In the four months prior to OBRA implementation, the monthly exit rates averaged 6.5 percent of the caseload; in the six months following OBRA implementation, exit rates averaged 6.7 percent of the caseload.

Figure 3.3 shows exit rates over the full period of the sample. The graph confirms that the implementation of OBRA had little impact on Food Stamp Program exit rates. There is no evidence of the acceleration in the rate of departure that might have been anticipated.¹

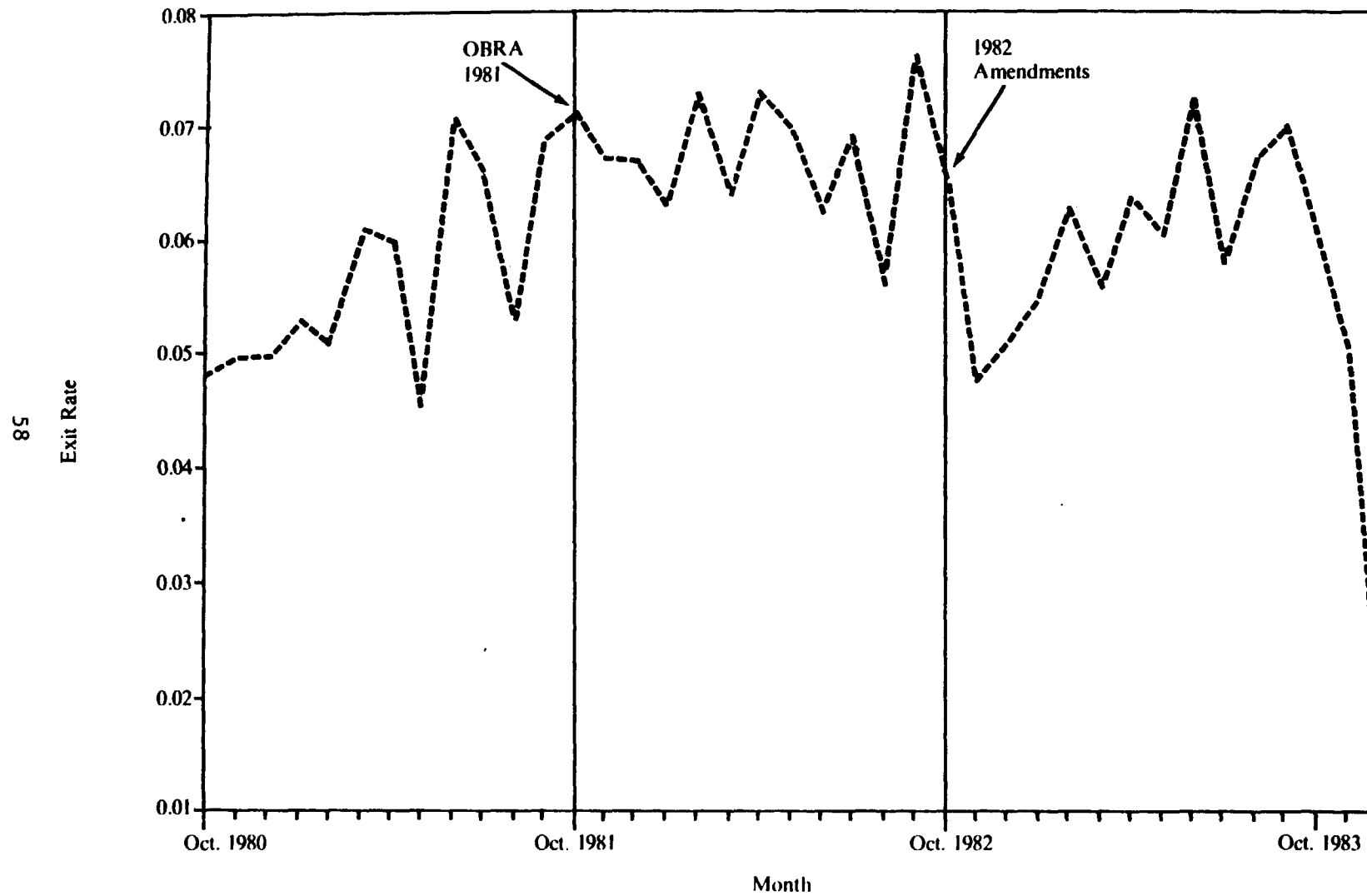
Entry rates exhibit a different pattern--entry rates in the four months prior to OBRA averaged 8.7 percent while in the six months subsequent to OBRA they averaged 7.5 percent. At first blush, this might imply that OBRA, at least for a period during the spring of 1982, depressed entry rates somewhat.

But a longer view of entry rates indicates that the downward trend was partially an extension of trends that began before the implementation of OBRA and partially part of a pattern that was repeated in the spring of 1983. Figure 3.4 shows entry rates over the full period of the sample (October 1980 through December 1983). The graph clearly shows a downward trend in entry rates that actually began in January 1981, well before the OBRA implementation, and continued through May 1982. Entry rates then rose again to slightly below their earlier levels. But an apparent downward trend began again in January 1983 and continued through May 1983. This repeated pattern

1. In Figure 3.3 and 3.4 results from very early months and the final month must be interpreted somewhat cautiously because of sampling variations and measurement issues. See the discussion in Appendix E for a fuller explanation.

Figure 3.3

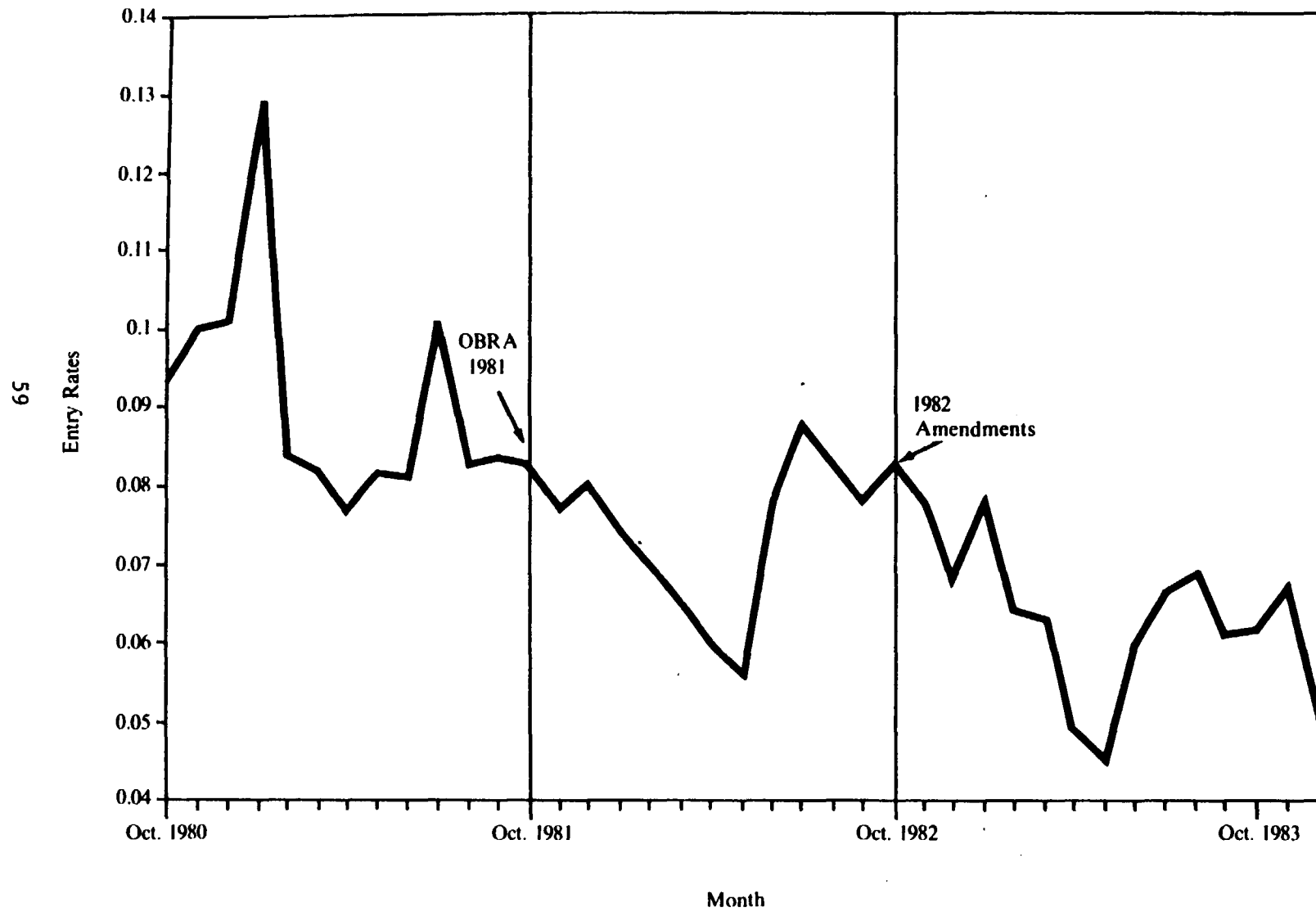
**Exit Rates of Food Stamp Cases,
October 1980 - December 1983**



Source: Case record survey undertaken by The Urban Institute. Preliminary data.

Figure 3.4

**Entry Rates of Food Stamp Cases,
October 1980 - December 1983**



Source: Case record survey undertaken by The Urban Institute. Preliminary data.

diminishes the persuasiveness of the hypothesis that the legislation was responsible for the downturn in entry rates in late 1981 and early 1982.

These entry-exit data from the case record survey indicate that the general downward trend in entry rates and therefore in net program growth began well before the implementation of the 1981-82 legislation. These findings are further confirmed by results from the net flows model which examined net program growth using aggregate food stamp recipient data from 1976 through 1983.

The net flows model, as discussed earlier, controls for demographic, economic, income and policy variables that might affect the growth or decline of food stamp recipient levels. After controlling for these events (and others), the results of the analysis show a strong and unexplained downward trend in the caseload beginning in 1979 and continuing through 1983. Table 3.6 shows the magnitude of this effect and explains how it was derived. By 1983, this negative effect was estimated to decrease the caseload by more than 600,000 recipients per month relative to what it would have been prior to 1977 (the first year in which the model measured an unexplained trend).¹ The five-year trend implied that the effect grew each year. This effect was statistically significant and far stronger than every other variable except for the elimination of the purchase requirement and a demographic variable relating to the number of small children.

It should be noted here that the downward trend is not apparent in examining actual monthly recipient levels in the Food Stamp Program. This is

1. This number should not be annualized. Estimates from the net flows model represent monthly changes which are not necessarily cumulative when the time period is extended. If, for example, the decrease in net flow was due to recipients who were only eligible for a short period (say, one month), the annual estimate of this effect would be approximately equal to the monthly estimate.

Table 3.6

THE DOWNWARD TREND IN THE NUMBER OF FOOD STAMP RECIPIENTS
AS ESTIMATED BY THE NET FLOWS MODEL

<u>Year</u>	<u>t Ratio</u>	<u>Estimated Change in National Monthly Caseload</u>
1977	+ .4	+47,639
1978	+1.0	+132,233
1979	-.6	-126,455
1980	-2.2*	-482,786
1981	-2.5*	-556,420
1982	-2.0*	-585,577
1983	-2.1*	-634,134

*Significant at the .95 level or better.

SOURCE: Urban Institute New Flows Model.

TECHNICAL NOTES: These estimates were derived using a statistical model which was designed to explain the change in the number of monthly recipients (caseload) over the period from 1976-1983. The model included numerous variables which controlled for economic conditions, demographic shifts (such as the age of the population) and policy changes, including the Food Stamp Program legislation of 1981 and 1982. A series of dummy variables was added to partially represent unexplained variance in each year after 1976, which was the base year. As can be seen in this table, effects in 1977 and 1978 were positive, indicating that unexplained factors were causing caseload flows to rise. But these effects were neither large nor statistically significant. In 1979, the effect became negative but was still relatively small and not significant. Between 1980 and 1983, the size and significance grew, indicating that a persistent and strong negative effect was present. The estimates in the table above were derived using the net flows model developed for this project which controlled for the complexities of using pooled cross-section, time series data. For a fuller explanation, see Appendix C.

because of other factors, principally economic, which exerted an upward pressure on recipient levels and masked the effects of the downward trend.

What is the explanation for this downward trend? The net flows model includes a large number of measurable demographic, economic, policy and regional variables. (See Table 5.8 for a list of the variables used.) The source of the negative trend cannot therefore be attributed to demographic or economic conditions, nor to legislated program changes since the analysis controls for those changes. There are two general plausible explanations which are difficult, if not impossible, to test. First, there may have been some behavioral change on the part of food stamp eligibles over this period making them less likely to apply for benefits for which they are eligible. Second, there may have been some changes in the administration of the program making it more difficult for applications to be processed as easily as they were prior to 1979. Possible explanations for such an administrative change could be the volume of inquiries and applications or the difficulty in adjusting procedures to conform with the large number of legislative and regulatory changes since 1979. This study has not been able to provide a conclusive answer to these questions but it seems clear from this analysis that observed decreases in both entry rates and net caseload growth were not due to the legislation of 1981 and 1982.

Benefit Levels. Three separate analyses were also used to analyze the impact of the 1981-1982 legislation on benefit levels. Data from three food stamp Quality Control surveys between 1981 and 1983 were evaluated using multivariate regression analysis and standard tabular analyses. These analyses controlled for income changes across the surveys and held constant caseload composition changes due to demographic shifts.

The DRI macro model, described in the previous section on caseload composition, also contained a submodel on average food stamp benefits. The benefits model also controlled for policy and economic changes.

Finally, the case record survey provided month-to-month data on benefits to food stamp households. These were analyzed by standardizing for the implementation dates of the legislation. Unfortunately, most food stamp offices implemented many provisions simultaneously and with few exceptions it is not therefore possible to isolate the effects of specific provisions.

As discussed at the beginning of this chapter, the general approach to analyzing costs and benefit levels in this study was to examine the actual changes in average benefits during the period from 1981 to 1983. The multivariate regressions used in analyzing the food stamp Quality Control data and in the DRI model control for a variety of factors and permit the analyst to decompose the observed total change in average benefits into its various components. This is a different approach from some previous analyses which attempt to isolate the effects of the 1981-1982 legislation by comparing post-1981 benefits with a synthetic benefit representing the program as it might have looked in the absence of changes.

The findings of the various multivariate regression analyses in this study indicate that the legislation of 1981-1982 had a small negative impact on average benefit levels--in the range of \$3 to \$4 per household per month in nominal terms in 1982, or a reduction of about \$6 to \$8 in real benefits. This represents a reduction of about 3 percent to 4 percent of average nominal benefits, and a reduction of about 6 to 8 percent in real terms. The bulk of the reduction in real benefits occurred in 1982, as a result of the cost of living adjustment delay; the delays in adjustments to deductions and the

overall reduction in deduction levels relative to prior years would also have had a small impact in 1983.

The food stamp Quality Control data show that average nominal benefits between August 1981 (before OBRA implementation) and August 1982 (after OBRA implementation) remained constant at \$103 per household. But a statistical analysis of the influence of various demographic and income factors on average benefits shows that this net change of zero was in fact due to several offsetting factors.

Analysis of the Quality Control data holding constant various factors shows that changes in the composition of the food stamp caseload increased benefits on average by \$4 per household per month. Changes in mean income, particularly increases in Social Security and SSI benefits, decreased average food stamp benefits by about \$1 per household per month. The OBRA legislation of 1981 decreased average benefits further by \$3 per month, according to these estimates. Table 3.7 illustrates how this net change occurred.

Table 3.7

CHANGES IN AVERAGE BENEFITS BETWEEN AUGUST 1981 AND AUGUST 1982

August 1981 Average Benefit	\$103
Effect of Caseload Composition Changes	+4
Effect of Income Changes	-1
Effect of 1981 OBRA	-3
August 1982 Average Benefit	\$103

The caseload composition effect largely occurs as a result of demographic changes in the caseload over this period. Between August 1981 and August 1982

there was a small decline in the proportion of food stamp households with elderly members, and a small increase in the proportion of AFDC recipients that, all else held constant, caused average benefits to increase slightly.

The income effect was not great since changes in mean income by source were not significant over this period for any group except the elderly. The small increase in the gross incomes of the elderly resulting from the Social Security and SSI COLAs that took effect in July 1982 was the principal cause of the \$1 benefit reduction shown in Table 3.7.

The reduction in average nominal benefits due to OBRA was, as might be expected, smaller than the real benefit reduction. In order to maintain real benefits at their 1981 levels, 1982 benefits would have had to have been somewhat higher. The total estimated impact of the legislative changes on average real benefits, therefore, is somewhat larger than the estimated impacts on nominal benefits, and is in the range of \$6 to \$8 per month.¹

Unfortunately, the Quality Control data did not permit estimation for fiscal year 1983 because the microdata were not yet available for this period. The rate of inflation was very low in 1983, however, and only the deduction adjustments--not the adjustments to maximum allotments--were postponed, so it is likely that the impact on benefits was very small.

The DRI benefits model related average food stamp benefits to several measures of the income available to low-income households (including the real

1. This estimate represents a decomposition of the change in average benefits that actually occurred between 1981 and 1982. It was computed by calculating the real equivalent of the August 1981 average benefit in August 1982, and then subtracting the estimated 1982 benefit, which had been adjusted to account for changes in recipients' incomes and the composition of the caseload. This estimate reflects the change in the purchasing power of benefits between August 1981 and August 1982. It is not equivalent to an estimate of the impact of the COLA delay on benefits derived by comparing the August 1982 benefit with a synthetic 1982 benefit that might have resulted if OBRA had not been implemented.

value of AFDC benefits, wages, and the difference between average income and the poverty line for those in poverty) and to several policy-related variables (such as the real value of the maximum food stamp allotment, the elimination of the purchase requirement, and the 1981-82 changes). This analysis was based on historical data on average food stamp benefits. After controlling for economic factors and regional variations, this model shows an estimated benefit reduction of about 2.5 percent on average in fiscal year 1982 due to the OBRA changes. This reduction is equivalent to \$3 per month for an average household. While this estimate is computed in real terms (that is, adjusted for inflation), it is probably understated since the DRI model could not adjust for changes in the composition of the food stamp caseload. The DRI model also suggests that the combined effect of both OBRA and the 1982 Amendments was substantially smaller in 1983. The estimated net long-term effect of both sets of changes was a reduction of about one-half of one percent in real average benefits.

Analysis of data from the case record survey also confirms both the relatively stable growth of average benefits over the 1981-1983 period, and the fairly sharp rise in average benefits resulting from the maximum allotment adjustments of October 1982. The OBRA changes in themselves had no apparent impact on average nominal benefits (not adjusted for caseload composition changes), which continued to rise from an average of \$95 in fiscal year 1981 to an average of \$101 in fiscal year 1982, as Table 3.8 shows. Month to month fluctuations in the average were small--well within the range that could result from sampling differences alone. The COLA in October 1982 caused an immediate increase of about \$5 in average benefits. Average benefits continued to increase over the next several months indicating that the COLA effect was sustained over time. Average benefits peaked at about \$115 in March 1983, and

Table 3.8
AVERAGE FOOD STAMP BENEFITS PER HOUSEHOLD,
JUNE 1981 - DECEMBER 1982

<u>Month</u>	<u>Average Benefit per Household (In dollars)</u>	<u>Month-to-Month Change in Average Benefit (In Percents)</u>
June 1981	101	+1.5
September 1981	100	-0.9
October 1981 (OBRA implementation)	99	-1.4
November 1981	100	+1.1
January 1982	100	+0.8
June 1982	99	-1.1
September 1982	102	+0.9
October 1982 (COLA "catch-up")	107	+4.7
November 1982	109	+2.0
November 1983	110	-0.9
Mean (October 1980-September 1981)	95	
Mean (October 1981-September 1982)	101	
Mean (October 1982-September 1983)	112	

SOURCE: Survey of Food Stamp Case Records undertaken by The Urban Institute. Data are preliminary. Mean values are for all active cases.

then fell to about \$110 over the summer months. Overall, benefits in fiscal year 1983 averaged about \$112, compared to about \$101 in fiscal year 1982.

Three separate data sources and analysis techniques then seem to confirm that the legislation of 1981 and 1982 had no dramatic permanent effects on the average benefit level of food stamp recipients. This does not mean, however, that individual provisions did not affect a subset of recipients.

Although the overall impact of the OBRA and related changes on benefit levels was relatively small, some of the legislative changes did in fact have major impacts for certain groups. The implementation of the new prorating rules for new food stamp recipients is a case in point and is one of the few for which independent effects can be identified.

There are several different ways to measure the effects of proration. The first simply compares average benefits for new food stamp households in their first month of participation over a period before and after the implementation of proration using data from the case record survey. To the extent that household circumstances among new applicants are relatively stable over this period, the average benefit should be smaller in the months after implementation. Table 3.9 demonstrates that this was, in fact, the case: there was a sharp decline in average benefits for new recipients between September and October 1981 as proration was implemented in most sites.¹ In the four months preceding October, benefits for new recipient households averaged \$114. In the four months following that, however, they averaged about \$91, a decline of about 20 percent.

A second approach, using the same data, compares the prorated benefit for

1. The number of new recipients in the sample in any given month is small, and not all sites implemented prorating at the same time, so the month to month changes in average benefits for new recipients shown in Table 3.9 must be interpreted with some caution.

Table 3.9

AVERAGE BENEFITS FOR RECIPIENTS IN THEIR
FIRST MONTH ON THE FOOD STAMP PROGRAM

JUNE 1981 - DECEMBER 1982

<u>Month</u>	<u>Number of Cases</u>	<u>Average Benefit</u>
June 1981	171	114
July 1981	218	113
August 1981	183	118
September 1981	192	112
October (OBRA and pro-ration implementation)	194	90
November 1981	179	99
December 1981	189	84
January 1982	175	91
February 1982	167	103
March 1982	153	82
April 1982	143	90
May 1982	131	83
June 1982	182	79
July 1982	210	90
August 1982	203	85
September 1982	194	104
October 1982 (COLA "catch-up")	210	100
November 1982	198	93
December 1982	175	100

SOURCE: Survey of Food Stamp Case Records undertaken by The Urban Intitute. Data are preliminary.

NOTE: a. The increase for February 1982 is perplexing and is being examined. One possible explanation relates to expiration of earnings disregards in AFDC which caused some recipients to lose AFDC benefits and possibly become eligible for food stamp benefits. Since AFDC-type families tend to have larger average benefits than most food stamp recipients, this could temporarily have increased the average for new recipients.

each new food stamp household to that household's expected benefit without proration. This ratio, averaged over the 27 months (beginning October 1981) for which data are available, indicates that the prorated benefit is about 30 to 40 percent below the benefit that would have been paid without proration.^{1,2}

These findings are confirmed by another study undertaken for FNS by SRA Technologies, Inc., based on a sample of about 5,300 new applicants between October 1981 and May 1984. The SRA study suggests that proration resulted in a 40 percent reduction for new applicants in the first month of participation.

Total Costs. The principal goal of this study was to examine the effects of the 1981-82 legislation on recipients' benefits and income. But those effects have implications for total costs as well.

In this study, total costs were examined using three approaches: the net flows model and the DRI macro model, both described earlier and the TRIM2 microsimulation model. The microsimulation model used a 1983 Census data base of approximately 60,000 households to analyze the interaction of the Food Stamp Program with other transfer programs during 1983, particularly AFDC, SSI and Social Security. Since these benefits (along with food stamps) are not well-reported to Census, the model simulates the characteristics of the

1. The range reflects two different treatments of cases where the prorated benefit is equal to the full monthly allotment. These two amounts should be the same only if the household applies on the first of the month. There were more of these cases than expected in the case record survey sample. If these cases are excluded, prorated benefits are 44 percent less than the full monthly allotment; if these cases are included, prorated benefits are 29 percent less.

2. The case record data indicate an interesting finding which may be significant but is tangential to this report. It was expected that the survey would find that new applicants from recipients would be evenly spread throughout a given month. The survey shows that nearly 40 percent of recipients apply for benefits during the first ten days of the month and that almost seven percent apply on the first day (rather than the expected three percent). This clustering of recipients acts to diminish the cost savings associated with proration.

programs in great detail. The details of the specifications allows the model to test the independent effects of many specific program changes.

While each approach used to estimate cost savings took somewhat different routes, the mathematical approach to the estimates is fundamentally the same. Each model calculated a reduction in the number of recipients (either persons or households) and multiplied this times either average benefits or, in the case of the microsimulation model, the actual benefit of the ineligible households. To the extent that average benefits declined as well, the average benefit loss was multiplied times the remaining participant households.

Since the impacts of the legislative changes were estimated to be relatively small for both total caseload size and average benefit levels, it is not surprising that the estimated impacts on total program costs were smaller than was previously expected. Overall, the study found that these changes reduced program costs in 1982 by about \$450 million to \$650 million, or about 4 to 6 percent. Savings in 1983 were somewhat smaller since the catch-up COLA would offset the growing impact of provisions such as the gross income cutoff. (This estimate does not include either the costs of the Food Stamp Program in Puerto Rico nor the savings associated with the Puerto Rico block grant.)

Findings from the net flows model imply total savings of about \$500 million in fiscal year 1982, but only if reductions in net flows were sustained. As discussed earlier, the net flows model is a monthly model, and the estimates it produced for both the benefit and caseload effects of the OBRA changes applied to the specific months in which the changes were implemented. It is difficult to estimate the longer term effects of the changes based on these results. The DRI model also implies estimated savings in fiscal year 1982 of about \$450 million to \$550 million, depending on the

level of benefits that those who lost eligibility as a result of the OBRA changes would have had. The benefit reduction estimates from the QC analysis, in combination with the estimated caseload effects, would imply slightly higher savings estimates--about \$650 million in fiscal year 1982.

Less information is available on fiscal year 1983 savings, but as discussed above, the DRI model found benefit increases resulting from the 1982 Amendments, so that total savings for fiscal year 1983 implied by that model would be somewhat lower than the fiscal year 1982 savings--in the range of \$150 million to \$300 million. The TRIM2 microsimulation model, which was based on calendar year 1983 data, produced a slightly higher estimate of total savings for 1983--about \$500 million. This is generally consistent with the empirical estimates from the QC, case record and aggregate data. The microsimulation estimates here used a later data base (1983) than previous simulations and the later data incorporates changes in the behavior of participants and eligibles. The microsimulation model is better able to adjust for specific changes such as those in caseload composition than are macro models such as the DRI model, but results from the other models developed for this study imply that the microsimulation techniques may slightly exaggerate the absolute level of estimated program effects.

Although these estimates of total savings are roughly consistent with the estimates of total caseload and average benefit reductions discussed earlier, they are clearly well below the level of savings expected at the time of enactment of the 1981-82 legislation. Several factors acted to reduce actual savings relative to the projections. Most notably, the projections were based on assumptions about the performance of the economy in the 1982-1985 period that were not fully borne out. In particular, there was a largely unforeseen decline in the rate of inflation in 1981-1982, which substantially reduced the

impact of the delays in the cost-of-living adjustments. In March 1981, when the savings estimates for OBRA were first prepared, the rate of increase in the Consumer Price Index (CPI) was expected to average 11.1 percent in 1981, 8.3 percent in 1982, and 6.2 percent in 1983. The actual inflation rate, however, was 10.4 percent in 1981, 6.1 percent in 1982, and just 3.2 percent in 1983. This decline in the rate of inflation reduced the size of the postponed cost of living adjustments, and therefore also reduced the relative savings from their postponements. This decline in the rate of inflation also meant that real benefit levels fell less than they would have under the OBRA assumptions, so the impact of the delays on recipients were also smaller than expected.

The recession of 1981-1982 may also have contributed to lower real savings (and smaller recipient impacts) for some of the legislative provisions relative to the projections, both by lowering the gross incomes of applicants, and by reducing the proportion of the caseload with earnings. The first of these effects may have dampened the impact of the gross income eligibility screen, while the second would have reduced the savings associated with the reduction in the earnings deduction. These effects would have had much smaller impact on savings, at least in the short run, however, than would the decline in the rate of inflation.

This chapter has argued that the legislation of 1981-82 only modestly affected the size of the food stamp recipient population and did not reduce either their benefits or their total income. If that is true, what other factors may have affected the Food Stamp Program in the 1981-84 period which caused it to behave differently than analysts expected?

The next three chapters discuss the impacts of three other factors on the Food Stamp Program over this period: trends in the demographic composition of

the caseload, economic cycles, and changes in other income transfer policies. They focus particularly on those factors that may have helped to dampen the effects of this legislation on total caseloads and on benefits.

Chapter IV

Changes in the Demographic Composition of the Food Stamp Caseload

The legislation of 1981-82 was not found to have had a major effect on food stamp recipients, but it was not the only factor that could have changed the program during the period from 1981 to 1984. Another potentially significant factor is the change in the demographic composition of households eligible for and participating in the Food Stamp Program.

Demography can change the character of the program in a way which is independent of legislation, policy, and economics. Underlying changes in the whole population (particularly the poverty population) occur which can expand or contract the population eligible for the program. These changes can manifest themselves via at least two different routes.

First, they can have a direct impact on the program. Such is the case with changes in the elderly population, for example. The newly elderly are relatively better-off than the elderly of previous generations, largely because higher earnings during their working years have both made them eligible for higher Social Security benefits and allowed them to save more for retirement. Additionally, cost of living adjustments in Social Security and SSI have permitted the elderly to maintain their living standards and move up the income distribution relative to other groups whose incomes were not protected against inflation. The more elderly there are with relatively high incomes, the less likely the elderly as a group are to rely on food stamp benefits.

Second, demographic factors can operate through other transfer programs such as AFDC or SSI. An increase in the divorce rate in the 1960's and early

1970's created larger numbers of poor female-headed families and contributed to growing caseloads in AFDC. Caseload growth in AFDC in turn caused caseload growth in the Food Stamp Program, since AFDC recipients were categorically eligible for food stamps at that time. Changes in the birth rate or the disability rate could be expected to have had similar effects.

This chapter examines the composition of the food stamp caseload over the 1980 through 1983 period, and the demographic factors that affected it. The chapter considers three major issues:

- o How has the caseload actually changed over this period?
- o How have these changes affected food stamp benefit levels?
and;
- o Were these caseload composition changes related to the legislative changes in the Food Stamp Program, or were they part of longer run trends in either the food stamp population or the population as a whole?

Each of these issues is discussed in turn in the three sections that follow.

Changes in Caseload Composition, 1980-1983

Overall, the composition of the food stamp caseload was relatively stable in the 1980-1983 period, as Table 4.1 indicates. The two major trends over this period were a decline in the proportion of households with elderly members, and a similar decline in the proportion of households with earners. Households with elderly members fell from almost 23 percent of the caseload in August 1980 to about 19 percent in August 1982, and to just over 18 percent in February 1983. The downward trend was not absolutely constant--there was an increase of just over one percentage point between February and August 1982--but its net impact was a decline of almost 20 percent in the proportion of households with elderly over the period as a whole. This net decline in the proportion of elderly households is statistically significant.

Table 4.1

COMPOSITION OF THE FOOD STAMP CASELOAD: DATA FROM
FIVE QUALITY CONTROL SURVEYS

	1980 (August)	1981 (August)	1982 (February)	1982 (August)	1983 (February)
Total Number of Households (000)	7,371	7,698	7,565	7,487	8,052
Percentage of Food Stamp Recipient Households With:					
Elderly Members (aged 60 or over)	22.6	20.9	18.6	19.9	18.1
Children	59.9	56.4	58.6	58.0	N/A
Female Heads	69.0	69.5	70.6	69.8	N/A
AFDC Income	N/A	40.1	44.5	42.6	43.5
Earnings	18.7	18.4	17.1	16.9	16.1
Mean Household Size	2.8	2.8	2.8	2.8	3.0

SOURCE: Food Stamp Quality Control Surveys for dates indicated.

NOTES: N/A indicates data not available. 1983 estimates are preliminary.

The proportion of households with at least one earner fell almost as much over the period, from almost 19 percent of the total caseload to about 16 percent. This change represented a decline of about 14 percent in the total proportion of earners. The decline in earners was particularly pronounced in the period between the August 1981 and February 1982 samples, when almost half of the total fall occurred, but the trend continued fairly steadily over the period as a whole. The change in the proportion of earners over the whole period is significant at a 95 percent confidence level, although none of the sample to sample fluctuations are statistically significant.

Although there were no pronounced trends in other major compositional variables, there were some interesting fluctuations over the period. The proportion of households with AFDC income, for example, rose considerably between August 1981 and February 1982, going from about 40 percent to well over 44 percent. This change represented more than a 10 percent increase in the proportion of AFDC recipients in the caseload as a whole. Over the next six months, however, the proportion of AFDC recipients fell again, to less than 43 percent of the caseload. This was followed by a small increase in the February 1983 sample, to about 43.5 percent of the total. The net impact of all these changes was an increase of about 3.5 percentage points, or almost 9 percent, in the proportion of the households in the caseload receiving AFDC over the 1981 through 1983 period. This total net change is significantly different from zero at a 95 percent confidence level. The individual fluctuations, however, with the exception of the change between August 1981 and February 1982, are not statistically significant.

Other aspects of caseload composition, such as the proportion of households with female heads and the proportion with children, remained fairly stable over this period. The proportion of households with female heads

varied by less than 2 percentage points over the entire period, and there was no particular pattern to the small amount of variation that did occur. The proportion of households with children fluctuated slightly more, but again without any particular trend. In both cases, the variations that did occur were not statistically significant.

In general, it is difficult to relate these changes directly to the legislative changes enacted in 1981 and 1982. Both the decline in the proportion of elderly and the decline in the proportion of earners are continuations of longer term trends, as the discussion in Chapter III made clear. For households with earners, households with elderly, and AFDC recipient households, the changes in sample proportions seem to be particularly sharp in the February 1982 sample, which was collected shortly after the implementation of the OBRA changes in October 1981. In two of these three cases, however, the changes seen between August 1981 and February 1982 were at least partially reversed over the next sample period, from February to August 1982. This may indicate that if there were direct impacts related to OBRA, their effects were quite short lived. In addition, unemployment rates in general were rising fairly rapidly in late 1981 and early 1982, as the recession deepened, and this factor may also have been responsible for some of the decline in the proportion of earners and rise in the proportion of AFDC recipients. And finally, the OBRA changes in AFDC and other programs may also have had some impact, at least in the short run.

Impacts of Changes in the Composition of the Food Stamp Caseload on Average Food Stamp Benefits

Different sub-groups within the food stamp recipient population have widely varying income levels and average benefits, as Table 4.2 demonstrates,

Table 4.2

MEAN MONTHLY GROSS INCOME AND MEAN FOOD STAMP BENEFIT FOR
HOUSEHOLDS WITH SELECTED CHARACTERISTICS

	August 1981	February 1982	August 1982
All Households			
Gross Income	349	345	358
Benefits	103	109	103
Average Household Size	2.8	2.8	2.8
Households with Elderly			
Gross Income	329	342	361
Benefits	46	45	38
Households with Children			
Gross Income	407	390	409
Benefits	141	147	140
Households with Earnings			
Gross Income	562	527	550
Benefits	114	126	120
Households with AFDC Income			
Gross Income	388	384	392
Benefits	135	138	135
Households with Social Security Income			
Gross Income	367	379	393
Benefits	53	57	51

SOURCE: Food Stamp Quality Control Surveys for dates shown. The tabulations are based on analyses by The Urban Institute, and may differ slightly from previously published estimates.

so changes in the relative proportions of these groups within the food stamp caseload can affect the average food stamp benefit level for the population as a whole. For example, households with children, including AFDC recipient households, tend to have higher than average food stamp benefits, while households with elderly members tend to have lower than average benefits. For the most part, these variations are related to differences in household gross incomes and especially, to variations in household size. AFDC recipient households, for example, tend to be both larger and poorer than the average food stamp household, while households with elderly members tend to be both smaller and less poor than the average.

Overall, therefore, the changes in the composition of the food stamp caseload that occurred between August 1981 and August 1982, which included a decline in the proportion of households with elderly members and an increase in the proportion receiving AFDC, might have been expected to raise average benefits. This increase might have been offset somewhat by the decline in the proportion of earners, who also tend to have large households and slightly higher than average benefit levels. But this would only happen if the decline in earners was due to earners leaving the program because of increased income--rather than to earners losing their jobs but remaining on the program. Some increase in average benefits should still have been expected, since the decline in the proportion of earners was small relative to the other changes, and earners' benefits are closer to the average than are those of the other two groups.

In fact, the regression¹ analysis performed for this study indicates that, all else held constant, the changes in the composition of the caseload between August 1981 and August 1982 should have raised average monthly benefit levels by about \$4 per household. This increase in average benefits resulting from the composition changes, however, was entirely offset by a \$4 decline in the average benefit that resulted partially from the OBRA changes and partially from changes in incomes of recipients. The actual average benefit level in August 1982, therefore, was about \$103--exactly the same as in August 1981.

The small proportion of the offsetting decline in benefits resulting from increases in recipients' average gross incomes came from increases experienced by the elderly, as Table 4.2 demonstrates. Households with elderly members had an increase in average gross incomes of about 10 percent between August 1981 and August 1982. Households with children (including AFDC recipient households), on the other hand, experienced an increase of approximately 1 percent, while households with earners had reductions in gross income averaging about 2 percent. Overall, the net impact of these income changes was an increase in average gross incomes for all recipients of less than 3 percent. In real terms, gross incomes fell slightly, on average--by about 3 percent. No major sub-group within the population experienced a significant decline in gross income over this period.

Trends in the Poverty Population

The final question remaining to be discussed in this chapter is the extent to which the changes seen in the composition of the food stamp caseload

1. The analysis of caseload composition changes from the Quality Control files was performed by combining data from three surveys (to expand the sample) and controlling for economic and policy variables through use of statistical regression techniques.

were unique to the program, as opposed to being characteristic of the poverty population as a whole. In this context, trends in the size and composition of the poverty population as a whole are of interest primarily for what they indicate about similar trends affecting the population eligible for food stamps.

It is important to note that these groups--the poverty population and food stamp eligibles--are not the same. There are two major ways in which the poverty population differs from the food stamp-eligible population. First, food stamp recipients may have gross income of up to 130 percent of the poverty level and still qualify for benefits. In practice, however, only 5 to 7 percent of all food stamp recipient households have incomes over the poverty level.

Second, in addition to the gross income test, the Food Stamp Program also has an assets test--households with countable assets worth more than \$1500 are not eligible for benefits.¹ The poverty statistics, on the other hand, include all persons with incomes below the poverty level, regardless of their asset holdings. A substantial proportion of these households, however--probably close to 25 percent--have enough assets to disqualify them from receiving food stamps.²

A final point with regard to this issue is that trends in poverty are more likely to be reflected in changes in the population eligible for food stamps than in the population actually participating in the Food Stamp Program. More households are eligible for food stamp benefits than actually

1. Households with two or more members, at least one of whom is elderly, may have liquid assets of up to \$3000 and still qualify for benefits.

2. See Food and Nutrition Service, "Interim Report to Congress," May 1984, Table 4.1, page 57. These asset data may be particularly important in economic downturns such as the recent recession when a large number of workers lose their incomes for a temporary period but for the most part retain their assets.

receive them, since some who could get benefits do not apply. Data on reasons for non-participation are somewhat inconclusive, but it is clear that the probability of participation is higher for families that would receive relatively large benefits than for those with higher incomes who would be eligible for small benefits. Thus, marginal increases in the poverty population may increase the number of people eligible for food stamps more than they increase food stamp participation, especially if those becoming poor are members of those groups that are less likely to participate in the Food Stamp Program.

As Table 4.3 indicates, differential increases in poverty rates across population groups have in fact taken place over the past several years, and many of the trends in the poverty population are similar to those seen in the food stamp caseload. In particular, the proportion of elderly in poverty has declined considerably, while the proportion of children has risen.

Overall, there has been a substantial increase in the poverty rate for the population as a whole since 1979--it has risen from 11.7 percent in that year to 15.2 percent in 1983, an increase of about 30 percent. Further, the rise continued over the entire period, although the 1983 figure was only marginally higher than that for 1982. In contrast, poverty rates for persons in families with female heads, although much higher to begin with, rose relatively less, from 32.0 percent in 1979 to 35.7 percent in 1983--an increase of less than 12 percent. The poverty rate for this group actually fell between 1982 and 1983--in 1982 it had been 36.2 percent. And for persons aged 65 and over, the poverty rate declined continuously from its level of 15.7 percent in 1980, reaching a low of 14.1 percent in 1983.

The fastest increasing poverty rates have been those for children, which may also help to explain the rising proportion of children in the food stamp

Table 4.3

PERCENT OF PERSONS IN POVERTY, BY VARIOUS
DEMOGRAPHIC CHARACTERISTICS

	1969	1975	1979	1980	1981	1982	1983
1) All Persons	12.1	12.3	11.7	13.0	14.0	15.0	15.2
Persons in Families	10.4	10.9	10.2	11.5	12.5	13.6	13.8
Children under 18	13.8	16.8	16.0	17.9	19.5	21.7	22.1
Unrelated Individuals	34.0	25.1	21.9	22.9	23.4	23.1	23.4
2) Persons in Families with Female Heads, no Husband Present	38.4	34.6	32.0	33.8	35.2	36.2	35.7
Children under 18	54.4	52.7	48.6	50.8	52.2	56.0	55.4
3) Persons 65 and Over	25.3	15.3	15.2	15.7	15.3	14.6	14.1
In Families	16.0	8.0	8.4	8.5	8.4	8.5	N/A
Unrelated Individuals	47.3	31.0	29.4	30.6	29.8	27.1	N/A

SOURCE: U.S. Bureau of the Census, Current Population Reports, Series P-60, nos. 130, 133, 138, 144, and 145.

NOTES: N/A indicates data are not yet available.

caseload since 1981. The proportion of all children in poverty increased from 16 percent in 1979 to over 22 percent in 1983, an increase of almost 40 percent. For children in female-headed families, the poverty rate rose from 48.6 percent in 1979 to 55.4 percent in 1983, an increase of about 14 percent. The higher rate of increase for children in general is consistent with the relatively rapid increases in poverty for married-couple and male-headed families, a result which often occurs during a recession due to job losses by principal earners. The high poverty levels seen for children in female-headed families throughout the period, however, help to explain why this group makes up a substantial proportion of the food stamp caseload in every year.

The changes in the poverty rates for various population subgroups outlined above have resulted in some changes in the demographic composition of the poverty population as a whole. Compared to 1979, when it was about 40.5 percent, the proportion of the poor in 1982 and 1983 who were in families headed by married couples or by men rose fairly markedly, reaching 45.5 percent in 1982 and falling to just under 45 percent in 1983. On the other hand, the proportion who were elderly declined from over 13 percent in 1980 to about 10.5 percent in 1983. The proportion of the poor who were in female-headed families was relatively stable, at about 34 percent, while the proportion of children who were poor rose substantially, although children under 18 continued to account for a fairly stable proportion--about 40 percent--of the total poverty population.

These trends were for the most part mirrored in the food stamp caseload. In particular, the declining proportions of both elderly persons and earners in the food stamp caseload seem to be closely related to similar changes in the poverty population as a whole. The one relatively minor exception to the

parallel between food stamp households and those in poverty has to do with the proportion of households headed by married couples and by males. This proportion rose slightly in the poverty population as a whole over this period, while remaining quite stable among food stamp households. Given the relatively close match overall between trends in poverty and in the food stamp populations, however, it appears unlikely that the legislative changes in the Food Stamp Program were a major cause of the compositional changes that occurred.

To this point, the discussion of the Food Stamp caseload has been based on data from the Quality Control surveys undertaken by USDA. Monthly data from the case record survey undertaken by the Urban Institute, however, largely confirm these findings.

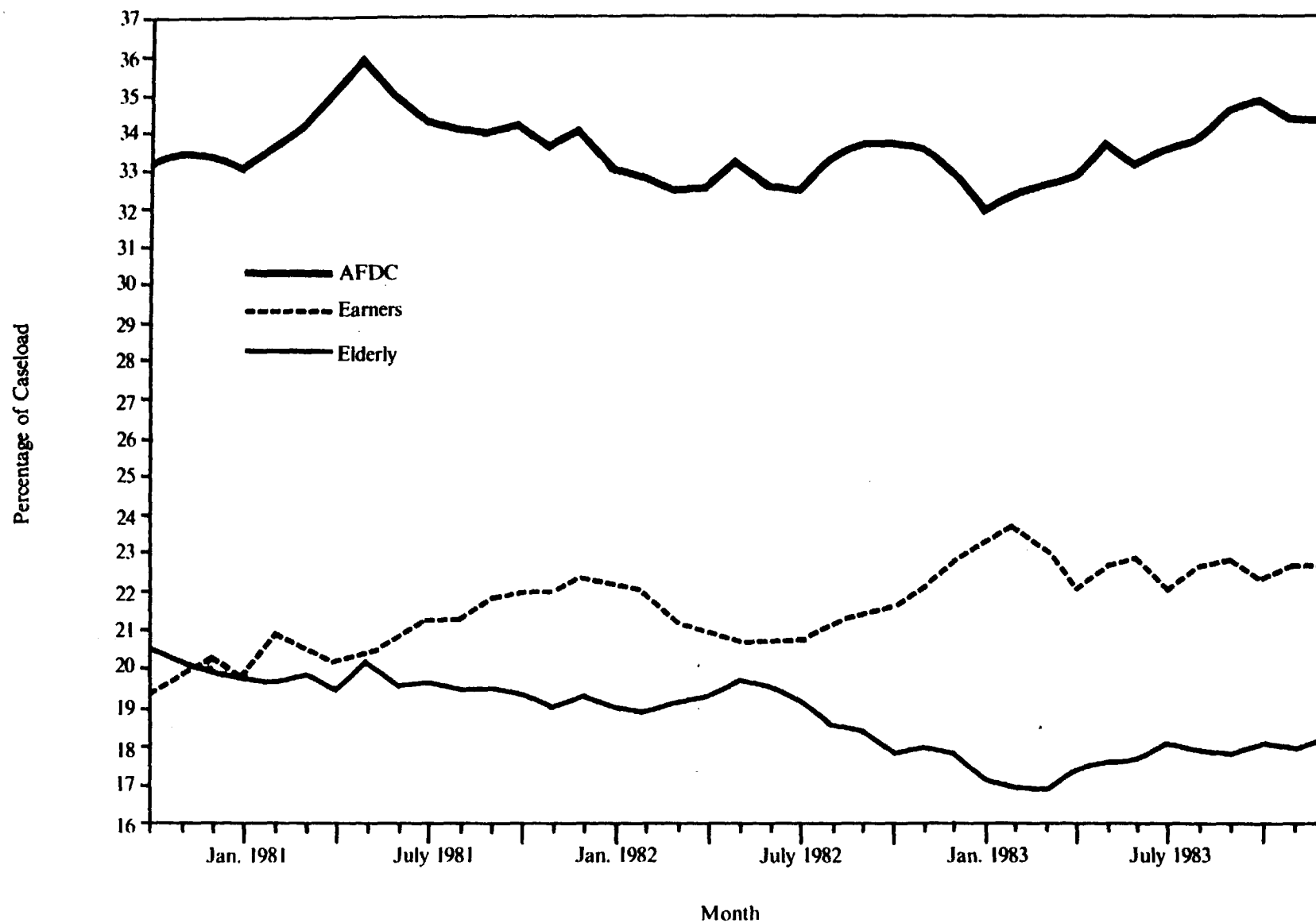
Some differences in the demographic profile of the caseload--in particular, the proportion receiving AFDC--do occur in these new case survey data and the QC samples. As Figure 4.1 demonstrates, however, the patterns of participation found in the QC data for the most part also appear in the monthly data from the case record survey. The proportion of AFDC households appears to be relatively stable, while the proportion of elderly persons shows the same type of decline in this sample and in the QC samples. The proportion of earners in this sample is somewhat more volatile, however, and does not appear to decline as it does in the QC data. These differences are currently being examined but appear unlikely to affect the overall results presented in this study.

Summary and Conclusions

The major trends in the composition of the food stamp caseload seen in the 1980-1983 period were first, a decline in the proportion of households with elderly members; second, a decline in the proportion of households with

Figure 4.1

**Percentage of Caseload With Various Characteristics,
October 1980 - December 1983**



SOURCE: Survey of Food Stamp Case Records undertaken by The Urban Institute. Preliminary data only.

earners; and third, a small increase in the proportion of AFDC recipient households. These trends did have some implications for average food stamp benefits across all households, since the population sub-groups that declined over this period had lower benefit levels, on average, than did those that grew. Overall, holding all else constant, these composition changes should have increased benefits by about \$4 per month on average between August 1981 and August 1982, the period in which the OBRA changes were implemented. No actual change in average benefits occurred during this period, however, because the increase in benefits resulting from the composition changes was offset by a decrease of approximately the same size, which resulted partially from the legislative changes and partially from changes in household income. Average benefits for the caseload as a whole were about \$103 in both months, therefore.

The trends in the food stamp caseload discussed above for the most part also characterize the poverty population as a whole over this period. Food stamp recipient households are somewhat more likely than are poor households in general to be female headed, and are somewhat less likely to contain elderly persons or earners. Nevertheless, the general trends in composition seen for the two groups are very similar. Further, most of these trends, including the decline in earners and in elderly persons, have characterized the food stamp caseload for many years, as discussed in Chapter III, and thus cannot be attributed solely to recent legislative changes.

Overall, the evidence reviewed in this chapter indicates that the composition changes that occurred in the food stamp caseload over this period resulted from long term changes in the population eligible for and receiving food stamps, rather than from the changes enacted in eligibility requirements for the Food Stamp Program itself. In that sense, therefore, these changes

are indeed external to federal policy in the Food Stamp Program. Nevertheless, if the caseload changes were not caused by policy changes in the Food Stamp Program, there is still some question as to their ultimate causes. Two likely possibilities are the changes in economic conditions that occurred over this period, and the changes in other programs that provide income support for the poverty population. The impacts of these two types of changes on the Food Stamp Program are assessed in the next two chapters.

Chapter V

The Food Stamp Program and the Economy

To this point, this report has shown that the effects of the 1981-1982 food stamp legislation on caseload size and recipient income and benefits were perceptible but smaller than expected. Furthermore, an examination of demographic changes in the caseload indicated that demographic trends which began in the late 1970's acted in varied but modest ways to alter the program. And finally, the report has implied that recent increases in the poverty population did not translate into a person for person growth in the food stamp population primarily because many of the new poor were either ineligible on the basis of asset holdings or were from groups such as two-parent families which have traditionally participated in transfer programs at low rates.

The size of the poverty population is to a large measure the result of the state of the national economy. But the economy interacts with the Food Stamp Program in more ways than by increasing or decreasing the number of poor. This chapter shows the complex ways in which economic conditions affect the Food Stamp Program generally and tries to answer the specific question of how the recession of 1981-1982 changed the number of program participants.

The analyses contained in this chapter relied principally on two econometric models, both described and discussed previously.

The net flows model is a pooled cross-sectional time series regression model which attempts to explain the net change in food stamp caseload over time. It employs monthly food stamp aggregate data from 1976-1984 and controls for economic conditions, federal transfer policy, and demographic

events through the use of a large set of variables, some of which are produced on a monthly basis, some on a quarterly basis.

The DRI macro model is really a series of models which uses regression analysis to model both the national economy and regional economies in the U.S. A special food stamp caseload model was built to identify the interactions between the national and regional economies and the level of food stamp recipients.¹ While the macro model concentrated on a more specific representation of the economy than the net flows model, it also controlled for policy and demographic variables, though in more general terms.

A thorough analysis of the interaction between the Food Stamp Program and the economy during the 1981-1984 period was required for this study because program recipient levels did not respond as previously expected to the recession during that time. It was always believed that economic cycles, particularly the level of unemployment, had an important impact on the number of food stamp recipients and therefore on total program costs. The FNS interim report to Congress noted that the rule of thumb prior to 1982 was that each percentage point increase in the unemployment rate would result in an increase of one million participants.²

The average annual unemployment rate rose from 7.5 percent in 1981 to 9.5 percent in 1982 and stayed at 9.5 percent in 1983. The previous rule resulted in an estimate for average monthly recipients in 1982 and 1983 that was two million persons higher than in 1981. Yet average monthly participants actually declined from 20.6 million in 1981 to 20.4 million in 1982 and then increased by 1.2 million to 21.6 million in 1983. This effect was therefore

1. This contrasts with the net flows model which evaluated the change in the level of recipients from month to month.

2. Interim Report to Congress, op cit., page 47.

only about half of what was expected and the change in direction between 1981 and 1982 was perplexing.

Why were previous expectations incorrect? Some analysts and commentators have argued that the legislation of 1981 and 1982 acted to suppress the historical response of the program to high unemployment rates. But Chapter III of this report shows that the legislation had only a small impact on the number of recipients during the period from 1981 to 1984 and this implies that other factors were at work. The analysis conducted for this study shows that the previous rule of thumb was incorrect primarily because the 1981-1982 recession was different from earlier ones and because previous estimation techniques were unable to account for the complex effects of the economy.

The specific results of these analyses, which are discussed in this chapter, can be summarized as follows:

- o The recession of 1981-1982 was different in a number of ways from previous recessions, principally in the rate of price and unemployment growth, which muted the Food Stamp Program's response to the economic conditions.
- o The Food Stamp Program itself was very different, primarily because it was not in the midst of rapid expansions as was the case during the 1973-1975 recession.
- o The relationships among the unemployment rate, the business cycle and the number of food stamp recipients is far more complex than earlier thought and previous econometric models were unable to adequately model this complexity.
- o A one percentage point increase in the unemployment rate will result in an increase of 50,000 food recipients per month, or 600,000 over the course of a year. But this latter result will only hold if the unemployment increase is sustained. The "50,000 per month" rule also must be modified depending on the starting level of unemployment, the point in the business cycle at which changes are being measured and the level of insured unemployment.
- o Estimates of the effects of the 1981-1982 recession on the number of food stamp recipients are very tenuous because they are highly sensitive to the alternative economic and policy assumptions used. One plausible alternative is to assume that the 1981 unemployment and business cycle

conditions would have been sustained on average throughout 1982. Such a set of conditions would have reduced the food stamp caseload by approximately 840,000 persons in 1982.

The remainder of this chapter discusses these findings in more detail. First, a brief explanation is given on how the economy interacts with the Food Stamp Program and what actually happened in the 1980-1984 period. Next, the chapter describes the economic events of 1980-1984 and the difference between the 1981-1982 recession and previous ones. Finally, the empirical estimates from the two econometric models are detailed.

How the Economy Interacts with the Food Stamp Program

The key to understanding the relationship between food stamp caseload size, composition, program costs, and economic cycles is to recognize the counter-cyclical nature of the program. As a potential source of benefits to a broad segment of the low income population, including those who may require only temporary assistance, the Food Stamp Program is explicitly designed to respond automatically to changes in economic conditions. In the downturn of a business cycle, production slows, excess capacity is generated, workers are laid off, unemployment rates rise, and wages stagnate or decline. As personal income drops, the proportion of families below the poverty threshold increases, having a direct impact on the pool of potential program eligibles. In a protracted downturn, as spells of unemployment lengthen, unemployment insurance benefits are exhausted, and personal assets are drawn down, an ever-increasing number of people are able to meet income and asset eligibility criteria. In addition, the rate at which eligibles choose to participate starts to increase as stop-gap measures, such as intra-family transfers, are no longer forthcoming and expectations for future opportunities are not optimistic.

The process reverses itself as the business cycle passes through the

trough and expansion begins. Employment opportunities increase, wages stabilize or begin to rise, personal income grows, and the number of individuals below the poverty standard shrinks.

Between July 1981 and November 1982 the U.S. economy was in the midst of a severe recession. The severity of the downturn was in part attributable to inadequate recovery from a short-lived recession which officially occurred between January and July of 1980--just one year earlier. By the end of the 1981-1982 recession the unemployment rate had risen to well over 10 percent, real GNP had declined by 3 percent, and disposable income had fallen slightly in real terms. It was expected that the impact of the downturn on the food stamp caseload would be great, largely because of program experience with previous recessionary periods. In the 1973-1975 recession, when the unemployment rate peaked at 8.1 percent--considerably lower than the 10.6 percent registered in 1982--the number of program participants grew from 12.6 million to 17.5 million, an increase of 39 percent from peak to trough.

The program growth in response to the 1981-1982 recession was smaller and occurred later than previously expected. Between the third quarter of 1981 and the fourth quarter of 1982, when the unemployment rate increased from 7.4 percent to 10.6 percent, the caseload rose by only 3.4 percent from 20.4 million persons to 21.1 million persons. There are several reasons for the apparently modest level of program growth. One explanation frequently offered is that the policy changes mandated under the 1981 and 1982 OBRA legislative packages served to slow the rate of program growth. However, results from analyses in this study which controlled for concurrent economic and legislative changes do not support this hypothesis. (These results are presented in Chapter III.) The legislation per se did not appear to have a significant impact on the caseload.

On the other hand, the economic climate and the Food Stamp Program itself were both very different in the period from 1980 to 1984 than in the mid-1970's and these distinctions did contribute to the different responses to the recession. The two recessions--that of 1973-1975 and that of 1981-1982--were characterized by different economic events. In the earlier recession the level and duration of unemployment was somewhat lower. However, over the course of the 1973-1975 recession the unemployment rate grew by almost 69 percent while it grew by only 45 percent in the 1981-1982 recession. Inflation was more severe in 1973-1975 than in 1981-1982. The CPI grew by 14 percent in the early recession; the index grew by 6.0 percent in 1981-1982 and food prices grew at an even slower rate. To some extent these experiences with price changes are reflected in the comparisons of declines in real GNP, disposable income, and personal spending. All three of these measures declined by a greater percentage in real terms during the earlier recession than during the later recession.

Overview of the U.S. Economy, 1980-1984

As 1980 began, the nation was experiencing a high rate of price inflation. Triggered by a round of large world oil price increases initiated by the OPEC nations in 1979 and early 1980, inflation reached annual rates of 15 to 20 percent in the first quarter of 1980. The economy entered a brief recession and price increases abated somewhat from peak levels but stabilized well above the 6 to 8 percent levels which had prevailed before the OPEC increases in the 1976-1978 period. In 1981, the annual rate of inflation was just over 10 percent.

Another striking feature of 1980 was the volatility of economic developments. Real GNP declined at a record rate at the start of the recession but recovered quickly and the recession became the briefest on

record. At the same time, interest rates were continually fluctuating which, along with inflationary expectations, was creating instability in the financial markets. The weak economy during early 1980 led to a rise in unemployment rates from just under 6 percent prior to the recession to around 7.5 percent at the end of the recession. The rate of unemployment and related measures, such as the average length of unemployment, inched steadily upward, stabilizing in early-1981 before starting to rise again with the recession that began in the third quarter of 1981. In fact, the relatively high rate of joblessness along with the very high rate of inflation are two factors that many point to as evidence that the recovery from the 1980 recession was incomplete and left the economy vulnerable to the subsequent downturn. Wages, on the other hand, continued to grow over this period in spite of high unemployment and low levels of productivity growth. But after accounting for price changes, real disposable income rose only slightly and real hourly earnings actually continued a deterioration that had begun in 1979.

The recession that began in the third quarter of 1981 and bottomed out in the fourth quarter of 1982 was arguably the most severe of the post-war era. Nominal GNP grew by over 12 percent in the short-lived recovery between the third quarter of 1980 and the third quarter of 1981. But in 1982, nominal GNP rose only 3.8 percent while real GNP declined by 2.1 percent. The dramatic comparison between the 1980-81 recovery and the 1981-82 recession is deceptive, however, unless the change in the inflationary trend between 1980 and 1982 is taken into account. Real GNP rose by only slightly more than 3 percent during the recovery beginning in the third quarter of 1980, much lower than the 12 percent nominal growth. Thus, a significant proportion of the decline in growth in nominal GNP during the 1981-1982 recession is associated with the reduction in inflation.

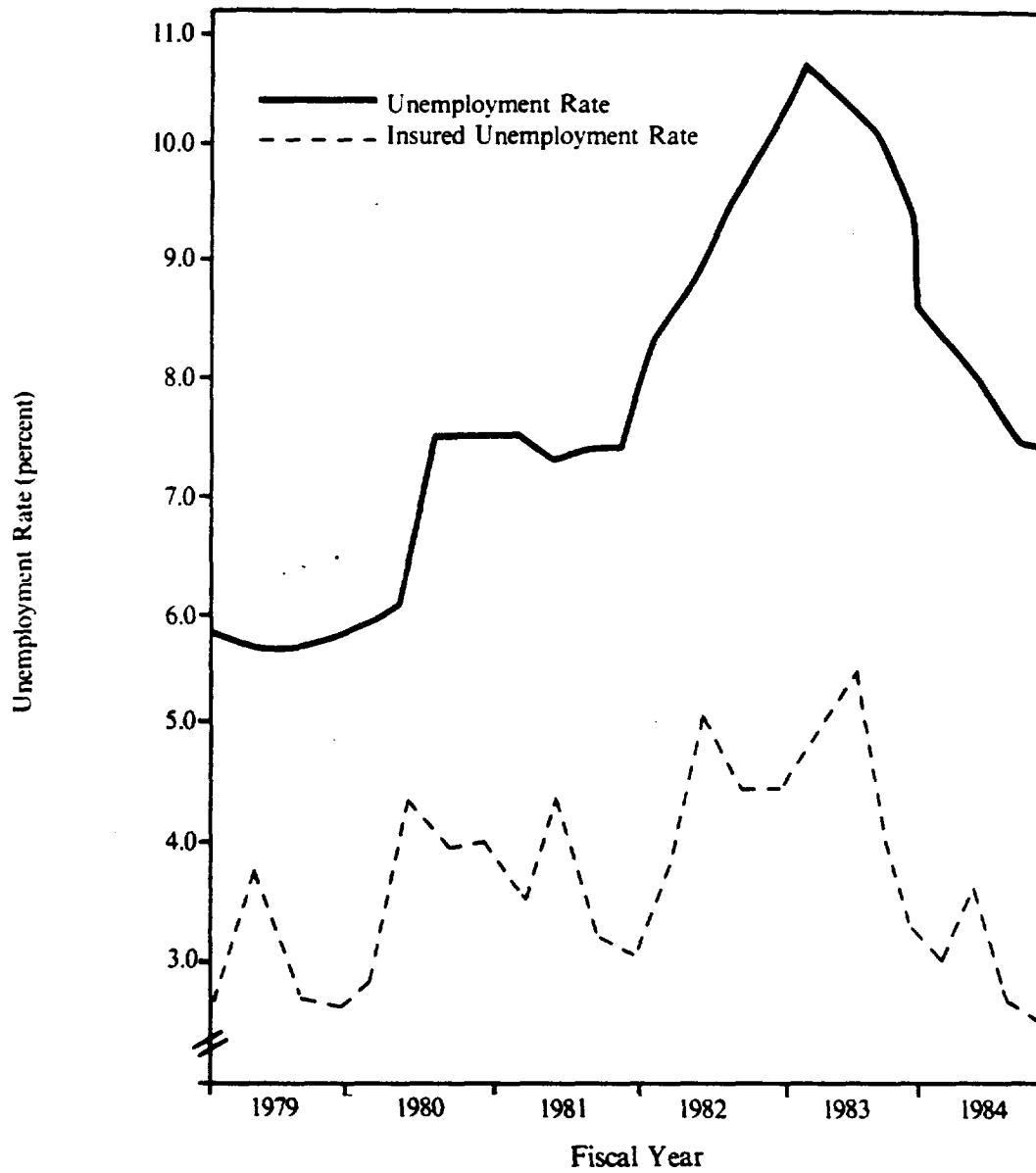
A key feature of the 1981-1982 recession was the slowdown in the rate of inflation. Because of this slowdown, unemployment came to replace inflation as the most serious economic problem facing the nation. From the peak to the trough of the recession, more than 4 million people were added to the unemployment rolls. Indeed, 12 million people, 10.6 percent of the civilian labor force, were unemployed in December 1982--a level higher than at any time since the Depression.

In Figure 5.1 the growth in the unemployment rate is traced between 1979 and 1984. The effects of both recessions are clearly seen. The rate of joblessness jumped from close to 6.0 percent to around 7.5 percent in the second quarter of 1980. Dwarfing this increase is the sharp climb in unemployment rates associated with the downturn in 1981. Between the last quarter of 1981 and the last quarter of 1982, the unemployment rate grew steadily from close to 7.5 percent to almost 11.0 percent of the labor force. However, the relative growth in the insured unemployment rate was not as dramatic over this time period. The insured rate grew from 3.0 percent to just over 5.0 percent in 1982--just slightly more than the growth in the 1980 recession. Indeed, while the total unemployment rate was climbing throughout 1982, the insured unemployment rate actually fell. In general, there was a tendency for the gap between the two measures to widen during this period. This implies that a greater proportion of the unemployed were not covered under the Unemployment Insurance system.

In early 1983 there were signs of economic recovery. The unemployment rate peaked and began to decline. Price increases remained low and well under control. The rise in national output was impressive. In the first four quarters following the trough in November 1982, real GNP grew at an average annual rate of 6.3 percent, well above the average annual rate of 4.0 percent

Figure 5.1

**National Unemployment Rate and
Insured Unemployment Rate, 1979 - 1984
(Quarterly Average by Fiscal Year)**



Source: Bureau of Labor Statistics, DOL

posted in the first four quarters following the 1980 recession. Growth in the second four quarters remained relatively strong, averaging 5.6 percent at an annual rate. Even though growth in output slowed in the second half of 1984, the recovery through the first eight quarters was the strongest since 1949.¹

In summary, during the period from 1980 to 1984 the economy was characterized by rapid change. The problem of rapid price inflation at the start of the interval was replaced by one of high levels of unemployment. In three years, the nation experienced two recessions--the first lasted only two quarters from peak to trough, but a sluggish recovery dissolved into a second, longer and more severe downturn lasting from the third quarter of 1981 to the fourth quarter of 1982.

Because of the countercyclical nature of the Food Stamp Program, these types of economic changes could be expected to impact caseloads in particular. Yet, growth in the number of participants was not significant over this period. In contrast, the caseload grew dramatically during the recession of 1973-75. Why the size of the program did not appear to track economic events in 1981-82 more closely is difficult to answer. Certainly it is possible that other program-related phenomena were operating to counteract countercyclical program changes. (These are discussed in Chapter IV and VI of this report.) The other possibility is that economic effects have actually changed over time or that the two major recessions were characterized by quite different economic events--different enough to result in very different responses.

As background to describing economic conditions associated with recessionary periods, it is useful to review briefly the program changes that

1. More recent figures for the first quarter of 1985 are less promising but ambiguous. It is not clear at this point whether the recovery has paused or ended.

went along with the 1973-75, 1980, and 1981-82 recessions. This discussion will serve to underline the very different degrees of program growth associated with the three recessions.

Food Stamp Program Changes During Recessionary Periods

Perhaps because the Food Stamp Program appeared to be so responsive to the business cycle in 1973-1975, the stage was set for the expectation of a similar response in subsequent downturns, especially the severe downturn of 1981-1982. It is important to keep in mind, however, that the Food Stamp Program underwent tremendous geographic expansion from 1973 to 1975. While only the state of Delaware initiated the program during that time, the number of projects nationally grew from 2,383 to 3,046. The number of recipients nationally grew from 13 million in early 1974 to over 19 million in early 1975.

The same pattern of growth between 1973 and 1975 observed at the national level exists in all of the regions, although there are some important differences among them. New England¹ experienced by far the greatest percentage increase in the number of recipients--growing from only 0.3 million to 1.1 million, an increase of 275 percent. In contrast, the West South Central region² grew by only 15 percent from 1.9 million in early 1974 to 2.2 million by early 1975 and then shrank back to 2.0 million by the end of 1975.

By January 1979 most states had implemented the elimination of the purchase requirement (EPR). Some growth was expected following EPR, but the magnitude of the growth which occurred throughout 1979--the caseload increased by 33 percent--was unexpected. Following this major program expansion came

1. States in New England region: Maine, Vermont, New Hampshire, Massachusetts, Connecticut, Rhode Island.

2. States in West South Central region: Arkansas, Louisiana, Oklahoma, Texas.

the "mini" recession of 1980, but the growth in the caseload slowed dramatically. The increase from peak to trough was a modest 5 percent; the increase for 1980 as a whole was only 12 percent. Some of the growth in 1980 was undoubtedly still the after-effects of EPR. Thus, how much of the 1980 growth can be attributed to the economic downturn is open to question.

During 1981 and much of 1982 the caseload leveled off at around 20 million persons (omitting Puerto Rico), and exhibited seemingly little response to the change in economic conditions. From peak to trough the caseload grew barely 3.0 percent during the 1981-1982 recession. But in December 1982, just after the official trough, the caseload increased by 3.7 percent in one month alone. The peak caseload was achieved in March 1983 and stood at 22.6 million people. Thereafter the caseload fell slightly and hovered around 21 million persons well into 1984.

Across the regions there were some differences in caseload changes during 1981-1984. New England experienced a slow but steady decline throughout the period while the East and West North Central regions experienced increases. The South Atlantic region followed the national pattern but finished with its caseload below the level achieved at the beginning of the recession.¹ The other regions followed the national pattern. Thus, even in the face of the type of economic fluctuations which characterized the period from 1980 to 1984, the program remained remarkably stable. On the basis of the response to the economic downturn in 1973-1975, greater changes would have been expected. The next section compares the economic conditions during the

1. States in New England: Maine, Vermont, New Hampshire, Massachusetts, Connecticut, Rhode Island; East North Central: Michigan, Ohio, Indiana, Illinois, Wisconsin; West North Central: Minnesota, Iowa, Missouri, Kansas, Nebraska, South Dakota, North Dakota; South Atlantic: Delaware, Maryland, D.C., West Virginia, Virginia, North Carolina, South Carolina, Georgia, Florida.

recessionary periods in an effort to determine the reasons for differential program response, especially between the 1973-1975 and 1981-1982 downturns.

Comparisons of Economic Conditions During Recessionary Periods

A more specific look at economic variables will help explain the events of 1980-1984. Table 5.1 summarizes changes in caseloads and per capita benefit levels from the peak to the trough of three officially designated

Table 5.1
PROGRAM GROWTH AND THE BUSINESS CYCLE
(% Change from Peak to Trough)

	Q4:73 P	Q1:75 T	Q1:80 P	Q3:80 T	Q3:81 P	Q4:82 T
Duration from P-T (Months)		17		7		17
Food Stamp Participants ¹ (Millions)	12.6	17.5 (+39.0%)	19.3	20.2 (+4.7%)	20.4	21.1 (+3.4%)
Per Capita FS Benefit (Current \$)	15.22	21.81 (+43.3%)	35.22	34.32 (-2.6%)	40.24	43.56 (+8.3%)
Real Per Capita FS Benefit (1967 \$)	10.15	12.73 (+25.4%)	14.36	13.29 (-7.4%)	14.52	15.20 (+4.7%)

SOURCE: Statistical Summary of Operations, Food Stamp Program (1973-82); and Economic Report of the President, 1975-84.

NOTE: 1. Participation Figures do not include Puerto Rico.

business cycles between 1970 and 1984. As the table shows, not all the cycles are the same number of months in duration. The 1980 recession was only seven months long, making comparisons of some measures across the three downturns difficult because of duration differences. Conveniently for this analysis, however, the 1973-1975 and 1981-1982 cycles were both 17 months in duration. The differences in the rate of program growth in the two recessions is underscored in this table. The food stamp caseload grew by 39 percent in

1973-1975 and real benefits by 25 percent. In contrast, the growth was only 3 percent and 5 percent, respectively, in 1981-1982.

The 1973-1975 recession was more severe from the perspective of declining GNP, disposable personal income (DPI), and personal consumption expenditures (PCE) as Table 5.2 shows. In real terms, GNP declined by 6.7 percent from the

Table 5.2

ECONOMIC CONDITIONS AND THE BUSINESS CYCLE

(% Change from Peak to Trough)

	Q4:73 P	Q1:75 T	Q1:80 P	Q3:80 T	Q3:81 P	Q4:82 T
Real GNP (Billions 1972 \$)	1240.9	1158.6 (-6.7%)	1494.9	1463.8 (-2.1%)	1525.8	1480.7 (-3.0%)
Real Disposable Personal Income (Billions 1972 \$)	864.2	831.6 -3.8%)	1022.8	1018.2 (-0.4%)	1068.1	1066.1 (-0.2%)
Real Personal Consumption Expenditures (Billions 1972 \$)	762.8	752.3 (-1.4%)	937.0	928.0 (-1.0%)	962.9	979.6 (+1.7%)

SOURCE: The Economic Report of the President, 1975, 1976, 1981, 1983, 1984.

the peak to the trough in the early recession. The declines posted in the later recession were much lower at 2.1 percent and 3.0 percent, respectively. Similarly, discretionary income dropped by almost 4 percent in real terms in the 1973-1975 downturn, but declined only marginally in 1980 and 1981-1982. Fiscal policy probably provided some support in the last recession as the tax cuts contained in the Economic Recovery Tax Act (ERTA) gradually took effect after being signed into law in August 1981. Among other features, ERTA provided for an across-the-board reduction in individual income tax rates over several years. Thus, income after taxes was given a direct boost during

the downturn which may have been one reason for the stability in disposable personal income.

Reflecting a similar trend, personal consumption expenditures fell in real terms by 1.4 percent during the 1973-1975 downturn and by 1.0 percent during 1980. These expenditures actually rose by 1.7 percent from peak to trough in the recent recession, a result partially attributable to fiscal policy over this period and partially attributable to a virtual halt in price inflation after 1982.

While aggregate disposable income and consumption expenditures stabilized in the recent recession, a downward trend in median family income and the percent of families with income below poverty continued. Table 5.3 shows that median income measured in constant dollars has been deteriorating since 1973--

Table 5.3
MEDIAN INCOME (IN 1983 DOLLARS) AND POVERTY STATUS

	<u>Median Family Income</u>	<u>Families Below Poverty:</u> <u>Total Rate</u>	<u>Female Head Rate</u>
1970	\$25,317	10.1	32.5
1971	25,301	10.0	33.9
1972	26,473	9.3	32.7
1973	27,017	8.8	32.2
1974	26,066	8.8	32.1
1975	25,396	9.7	32.5
1976	26,179	9.4	33.0
1977	26,320	9.3	31.7
1978	26,939	9.1	31.4
1979	26,885	9.2	30.4
1980	25,418	10.3	32.7
1981	24,525	11.2	34.6
1982	24,187	12.2	36.3
1983	24,580	12.3	36.0

SOURCE: Statistical Abstract of the United States 1983-1984.

the aftermath of the 1973-1975 recession and the OPEC-related price shocks during 1974. Similarly, the proportion of families with incomes below poverty thresholds has been increasing steadily since 1974 and stood at 12.3 percent in 1983--higher than at the end of either of the two previous recessions. For female households the rate in 1983 was 36.0, as compared to 34.6 in 1981 and 32.5 in 1975.

Chapter IV presented a detailed discussion of the characteristics of and trends in the poverty population and their implications for the Food Stamp Program. Poverty rates tend naturally to grow during recessions and recede or stabilize after they are over. But the growth in poverty rates after the 1981-1982 recession suggests greater pressures on the Food Stamp Program in recent years than during the 1973-1975 recession and its aftermath. Changes in the composition of the poverty population--in particular, the relative growth in the proportion of families headed by men or by married couples, and the decline in the proportion headed by an elderly person--may have acted to dilute the impact of growth in poverty rates on food stamp caseloads.¹ Additionally, figures for 1984 are not yet available and the effects of the robust recovery are not reflected in Table 5.3.

One of the outstanding differences between the three recessionary periods is the rate of price change during and after the downturn. Major OPEC-related price increases affected the entire economy in late-1973 and 1974 and again in 1979. Thus, the peaks of the two earlier recessions either coincide with or follow closely rapidly growing inflation. Table 5.4 indicates that from peak to trough, the overall CPI rose by 14.1 percent in 1973-1975, by 5.5 percent

1. As discussed in Chapter IV, these groups tend either to be ineligible for food stamps because of asset tests or have shown a historically lower rate of participation even when eligible.

in the seven month recession of 1980, and by only 6.0 percent in the downturn of 1981-1982.

Table 5.4
PRICE CHANGES AND THE BUSINESS CYCLE
(% Change from Peak to Trough)

	Q4:73 P	Q1:75 T	Q1:80 P	Q3:80 T	Q3:81 P	Q4:82 T
CPI-All Items ¹ (1967=100)	137.6	157.0 (+14.1%)	236.5	249.6 (+5.5%)	276.7	293.4 (+6.0%)
CPI-Food ¹ (1967=100)	149.9	171.3 (+14.3%)	245.3	258.2 (+5.3%)	277.2	286.6 (+3.4%)
Annual Rate of Change:						
CPI-All Items	9.6%	6.0%	16.8%	12.0%	12.0%	1.2%
CPI-Food	10.4%	0.0%	4.0%	17.6%	7.6%	0.8%

SOURCE: The Economic Report of the President, 1975, 1976, 1981, 1983, 1984.

NOTE: 1. The CPI indexes after 1978 are for all urban consumers; prior data are for urban wage earners and clerical workers only.

It is clear that inflation abated to a greater extent in the recent recession than during 1973-1975. An examination of the rate of inflation during critical points in the business cycle emphasizes this point. At the peak of the cycle in late 1973, the annual rate of inflation was 9.6 percent; the price shocks attributable to rising world oil prices were beginning to affect the economy. By the trough of the cycle in early-1975, although the CPI had risen by 14.1 percent since the peak, the annual inflation rate was running at 6 percent in that quarter--a slight moderation in the pace of inflation as compared to the peak. Analogously, in 1980 the annual rate of inflation was running close to 17 percent at the peak, moderating somewhat to

12 percent at the trough. In general, a slowdown in the pace of inflation is expected during a recession, even if prices continue to rise. But, in both the 1973-1975 and 1981 downturns, prices were still rising rapidly by the low-point in business conditions. In contrast, the inflation rate fell to just over 1 percent from a rate of 12 percent during the 1981-1982 downturn. Moreover, the rate of inflation has remained below 4 percent since then.

To a large extent the pattern of change in food prices has been similar to that of the overall index, but there are some differences. On the one hand, peak to trough changes in the CPI for food are identical to those for all items, except in 1981-1982 where the food price index rose less rapidly than the overall index (3.4 percent versus 6.0 percent). On the other hand, point-in-time estimates of the rate of change in food prices behaved differently across the three recessions. At the peak of the 1973-1975 business cycle food prices were rising at an annual rate in excess of 10 percent, but the growth slowed to near zero in the first quarter of 1975--the trough of the business cycle. Similarly, the annual rate of growth fell to .8 percent from 7.6 percent from peak to trough in 1981-1982. Thus, in both recessions food prices were growing less rapidly than the general price index as business conditions bottomed out. The exact opposite was true in 1980. Moderate at the peak of the business cycle, the rate of growth in food prices climbed to 17.6 percent at an annual rate in the third quarter of 1980.

There are several implications for the Food Stamp Program of the relatively strong price response in the 1981-1982 recession. First, the growth in the nominal value of the poverty standard was held down which may be expected to depress the growth in the eligible population all other factors being equal. As noted earlier, however, poverty rates actually grew during this period. This implies that, unlike the growth in poverty population in

the 1973-1975 recession, the growth in poverty in 1981-1983 was due primarily to income losses through unemployment rather than to income deterioration due to inflation. This may have created a different kind of food stamp eligible household, i.e. primarily two-parent families, who are traditionally less likely to participate in the programs. Second, the slowdown in price increases also resulted in a slower growth in the cost of the Thrifty Food Plan (and therefore smaller adjustments in the food stamp allotment) and the allowable deductions. Finally, and this point should not be ignored, once inflation was under control, or perceived to be so, expectations by potential food stamp participants regarding future growth in purchasing power were cast in a more positive light. In other words, once price pressures were relieved newly eligible households which considered participating may have decided not to do so.

While significant improvement occurred in inflation, the 1981-1982 recession distinguishes itself from the earlier downturns in the level and duration of unemployment. In fact, by the fourth quarter of 1982 the civilian unemployment rate reached a post-Depression high of 10.6 percent of the labor force. Unemployment typically rises rapidly during a recession. In that context, the 45 percent rise in the unemployment rate from peak to trough in the 1981-1982 recession shown in Table 5.5, while dramatic, is not as great as the 69 percent increase over the same number of months in 1973-1975. However, the level of unemployment in the later recession is clearly a factor which should have put greater pressure on food stamp caseloads. In addition, the average spell of unemployment at 17.5 weeks was considerably higher in 1982 than in 1975 when it was 11.3 weeks. Even at the peak of the business cycle in 1981, average duration of unemployment was higher than at any time during the 1973-1975 downturn, a factor related to the relatively high unemployment

Table 5.5
UNEMPLOYMENT, EARNINGS AND THE BUSINESS CYCLE
(% Change from Peak to Trough)

	Q4:73 P	Q1:75 T	Q1:80 P	Q3:80 T	Q3:81 P	Q4:82 T
Unemployment Rate	4.8%	8.1% (+68.8%)	6.2%	7.6% (+22.6%)	7.4%	10.7% (+44.6%)
Avg. Duration of Unemployment Weeks	9.8	11.3	10.8	12.4	14.0	17.5
Adjusted Hourly Earnings (1977=100)	100.8	98.4 (-2.4%)	102.3	101.8 (-0.5%)	92.3	93.5 (-1.3%)

SOURCE: The Economic Report of the President, 1975, 1976, 1981, 1983, 1984.

rate obtained at the peak of the business cycle in 1981. This clearly supports the contention that the recovery after the 1980 recession was incomplete and contributed to the severity of the 1981-1982 cycle.

At the same time that unemployment rose to record highs, the percentage of unemployed people receiving unemployment compensation benefits was relatively low. The insured unemployment rate (IUR), while not strictly comparable to the total unemployment rate (TUR), has historically tended to mimic changes in the latter.¹ Recent years, however, have witnessed a sharp break in the relationship between the insured and total rates. In 1982 the total unemployment rate was 9.7 percent and the insured unemployment rate was 4.7 percent--a 5.0 percentage point difference. In contrast, the insured rate

1. The insured unemployment rate is the number of recipients of regular unemployment insurance benefits divided by the total number of jobs covered by the system.

stood only 2.6 points lower than the total rate in 1975--5.9 percent versus 8.5 percent.

Compounding the decline in the fraction of the unemployed who are receiving regular benefits, there has been an even greater drop in the proportion receiving extended and supplemental unemployment insurance benefits. As a result, the proportion of unemployed workers covered by all types of benefits was lower in 1981-1982 than in any other postwar recession. In 1975, in particular, 78 percent of jobless workers were covered while in 1982 only 45 percent received compensation. Thus, the countercyclical stimulus potentially provided by unemployment insurance and related programs was considerably less in the most recent recession. This should have caused a greater flow onto the food stamp caseload.

There is one factor, however, operating to cushion the impact of a spell of unemployment on the household, namely, the growth in the number of two-earner households. The rise in female labor force participation rates is well documented and, while female unemployment rates tend to be higher than male rates, the likelihood of both earners being unemployed simultaneously is lower than that of either person experiencing unemployment. Furthermore, this trend has been growing through time. In 1975, 47.3 percent of unemployed husbands had an employed wife or other family member. By 1980, this figure had grown to 53.2 percent and in 1981 it stood at 56.7 percent. Although the percentage had fallen slightly to 54.3 percent in 1982--it was still significantly higher than the level in 1975. Interestingly, the percentage fell still further in 1983 to 50.5 but rose to 56.7 in 1984.

In summary, a comparison of economic developments during the business cycle generates the conclusion that several factors would have led to a rise in the net flow of individuals onto the food stamp program during the 1981-

1982 recession. There were, however, other factors operating to counteract this result. In Table 5.6 factors leading to differential Food Stamp Program response between the two major recessions are summarized.

Table 5.6
FACTORS LEADING TO DIFFERENTIAL FSP RESPONSE

Factors Expected to <u>Increase</u> FSP in 1982 relative to 1975	Factors Expected to <u>Decrease</u> FSP in 1982 relative to 1975
<ol style="list-style-type: none"> 1. Record high levels of unemployment--TUR stood at 10.7% at the trough of the business cycle. 2. The average duration of unemployment was as high as 17 weeks; a relatively low proportion of jobless covered by unemployment insurance. 3. Poverty rates were continuing an upward trend, especially for families headed by a male or a married couple. 	<ol style="list-style-type: none"> 1. The growth in the unemployment rate was less during the 1981-1982 recession. 2. The rate of growth in the general price index and the food price index slowed tremendously. 3. GNP, DPI, and PCE did not fall by as much in real terms as in 1973-1975. In particular consumption expenditures continued to grow and personnel savings fell during 1981-1982. 4. The growth in female labor force participation and incidence of two-earner couples helped provide households increased insurance against spells of unemployment.

Empirical Estimates of Economic Effects

In this study, several separate analyses were conducted to obtain estimates of the impact on the food stamp caseload of changes in important economic variables, controlling for the influence of OBRA legislation and other program features. These analyses are distinguished by the level of disaggregation of the underlying data. At one end of the spectrum is the DRI

macro model in which estimates are based on national and regional data. At the opposite end of the spectrum is an analysis based on a sample of actual household data from the food stamp case record survey which measures participation patterns from 1980 through 1983. In the middle are a set of estimates from the net flows model obtained from state-level economic and food stamp data.

In order to test as many reasonable hypotheses about the Food Stamp Program and the economy as possible, numerous model specifications were estimated. These specifications included different functional forms and a large number of variables. Tables 5.7 and 5.8 show a selected number of variables tried in the various specifications. The final specifications were selected for their statistical properties including tests for explanatory power, goodness of fit, and lack of bias in the estimated coefficients.

The findings of the various analyses from the final model specifications support the notion that economic conditions affect the level of food stamp participants, the net flow onto the program, and the characteristics of participating households. But the way in which these effects operate is complex. In particular, it appears that the impact of changes in important economic measures, such as the unemployment rate, the duration of unemployment, the level of real wages, or the poverty rate may be different today than it was in the early years of the program. This is not unexpected for at least two reasons. First, the program itself has evolved considerably since 1970; although the built-in interactions between the program and economic events remain, the impact of economic changes may be different today than it was in the 1970's. Second, the character of the economy has changed in so many ways that it is difficult to quantify exactly those changes that

Table 5.7

LIST OF SELECTED VARIABLES TRIED IN DEVELOPING
THE DRI MODEL

Dummy variable indicating the elimination of the purchase requirement in the Food Stamp Program**
 Dummy variable indicating the implementation of the OBRA 1981 legislation**
 Dummy variable indicating the implementation of the 1982 Food Stamp Amendments
 Number of AFDC recipients**
 Number of SSI recipients
 Number of persons below the poverty line**
 Civilian unemployment rate**
 Civilian unemployment rate lagged 1 quarter
 Civilian unemployment rate squared
 Real wage rate**
 Percent of the unemployed who have been unemployed for more than 52 weeks**
 Persons unemployed 26 weeks or more
 Persons unemployed 27-52 weeks
 Number of unemployment insurance beneficiaries who exhausted their benefits
 Ratio of the unemployment rate to the insured unemployment rate
 Labor force participation rate of females
 Maximum food stamp allotment
 Real income per capita
 Real income per capita squared
 Difference between mean income of all persons below the poverty line and the poverty line
 Persons with incomes below 50 percent of the poverty line
 Persons with incomes between 50 and 100 percent of the poverty line
 Persons with incomes between 101 and 130 percent of the poverty line
 Number of persons below 125 percent of the poverty level
 Real mean income of persons age 65 and older
 Real mean income of persons below age 64
 Relative price of food to price of all other goods
 Food price index

NOTES: No asterisk indicates the variable was discarded. Single asterisk (*) indicates the variable was used in final model. Double asterisk(**) indicates the variable was used in final model and was statistically significant.

Table 5.8

LIST OF SELECTED VARIABLES TRIED IN DEVELOPING
THE NET FLOWS MODEL

Region*
 Population by age**
 Elimination of the purchase requirement**
 1981 OBRA*
 1982 Amendments*
 Number of food stamp offices*
 Maximum food stamp benefit (family of 4--constant \$)*
 AFDC case openings**
 AFDC case closings**
 Maximum AFDC benefit (family of 4--constant \$)*
 Average Social Security benefit (aged couple--constant \$)*
 Average SSI benefit (constant \$)*
 Business cycle conditions*
 Per capita personal income (constant \$)*
 Unemployment rate**
 Ratio of insured unemployment rate to total unemployment rate (squared)**
 Lagged unemployment rate**
 Unemployment rate interacted with business cycle conditions*
 Year**
 Specific legislated items in 1982 OBRA package
 Income distribution
 Average weekly earnings (constant \$)
 Regional interactions with the unemployment rate and per capita income
 Alternative interactions between insured and total unemployment rate
 Alternative specifications of the lagged unemployment rate
 Per capita income interacted with lagged unemployment rate
 Duration of unemployment
 Unemployment rate squared

NOTES: No asterisk indicates the variable was discarded. Single asterisk (*) indicates the variable was used in final model. Double asterisk (**) indicates the variable was used in final model and was statistically significant.

can be expected to affect food stamp participation. The remainder of this section describes these results in more detail.

Results from the DRI Model. A model of the level of food stamp participants was estimated by DRI using time series data from 1976 to 1983 on regional program and economic data. The DRI macroeconomic model provides estimates of economic effects while controlling for the unemployment rate, the proportion of unemployed who have been jobless for at least 52 consecutive weeks, the real wage rate, the poverty rate, participation rate in the AFDC basic program, the elimination of the purchase requirement, and the 1981 OBRA changes. As mentioned earlier in this chapter, the results suggest a strong direct impact of changes in the unemployment rate and the poverty rate. A lesser, although generally significant, positive impact is associated with changes in the measure of long-term unemployment. Changes in the real wage rate do not play a significant role in predicting caseloads. Furthermore, all of these effects exhibited regional variation.

The key result from the DRI results is that a one point increase in the unemployment rate leads to an increase in the level of food stamp cases at the national level of 320,000 persons in a calendar quarter. The annualized estimate of the impact appears to be quite high, on the order of 1.3 million persons, but the DRI quarterly estimate is not easily translated into annualized figures. First, it is a short-run estimate and is therefore inherently subject to some error when the time period on which it is based is extended. In general, the rise in unemployment (not just the level) would have to be sustained for the results to apply over a full year. Second, while the DRI model is a good indication of the strength of the unemployment rate, technical constraints (due to the number of data points) prevented use of a more complex series of business cycle and unemployment changes. The DRI model

provides insight into the power of the unemployment rate but it also points up why similar previous specifications were flawed in their estimates of the magnitude of the Food Stamp Program's response to unemployment. The net flows model, discussed in the next section, was able to overcome the data constraints of the DRI model.

The DRI model, however, was extremely useful in identifying the fact that the Food Stamp Program in different regions responds differently to economic changes. Considerable regional variations are contained in the national estimate. In the Mid-Atlantic region the rate of unemployment does not play a significant role in explaining caseloads. In the New England, East South-Central, West South-Central, and the Pacific Northwest regions unemployment effects are estimated to be very strong.¹

Results from the Net Flows Model. Because the role played by unemployment, in particular, is highly complex, a net flows model based on more disaggregated data was estimated. This model makes use of time series data at the state level and looks at the net changes in the number of food stamp participants from one month to the next rather than the level of cases at a point in time. The idea is that such a model can provide more refined estimates of the effects of such important variables as the unemployment rate. The data on which the net flows model is based reflect much more variation in unemployment rates and allow for a dynamic effect on changes in the caseload as unemployment rates change through time.

Results from the net flows model suggest that if the unemployment rate rises by one point there is a net increase of approximately 50,000 individuals

1. States in Mid Atlantic region: New York, Pennsylvania, New Jersey; New England: Maine, Vermont, New Hampshire, Massachusetts, Connecticut, Rhode Island; East South-Central: Kentucky, Tennessee, Alabama, Mississippi; West South-Central: Arkansas, Louisiana, Oklahoma, Texas; Pacific Northwest: Montana, Wyoming, Idaho, Washington, Oregon, Alaska.

onto the food stamp caseload in a single month--this translates into a quarterly estimate of approximately 150,000 individuals, a much smaller result than the DRI model. This result, appealingly simple as stated, should be modified, however, to recognize the complexities of economic interactions. First, changes in the unemployment rate do not operate in a strictly linear fashion. The higher the level of unemployment, the greater the marginal effect of a change in unemployment. For example, if the total unemployment rate rises from 4 percent to 5 percent the net flow of cases is estimated to increase by only 26,000 individuals. In contrast, if the total unemployment rate rises from 9 percent to 10 percent--as it did during the recent recession--an estimated 55,000 individuals are added to the caseload on net.

Furthermore, the insured unemployment rate is an important factor in determining the response. Holding the total rate constant as the insured rate rises, the marginal effect of a change in total unemployment is decreased--the impact of rising unemployment on the caseload is diluted if the insured unemployment rate is relatively high. For example, as the total unemployment rate rises from 9 percent to 10 percent, the estimated increase in the net flow is 55,000 cases, assuming an insured unemployment rate of 3 percent--relatively low. On the other hand if the insured unemployment rate is relatively high, say 6.75 percent, the estimate drops to 46,000 cases. Table 5.9 illustrates some of the complexities of this relationship.

Other modifications to the "50,000" rule include: (1) the effect is muted if the business cycle is at a peak and the effect is enhanced if the business cycle is at a trough; (2) if unemployment rates are rising through time, there is an even greater tendency for the net flow of cases to rise in the face of a fixed increase in unemployment rates. This last point implies that unemployment effects have concurrent as well as lagged effects on the net

Table 5.9

THE RELATIONSHIP BETWEEN SELECTED UNEMPLOYMENT RATE
INCREASES AND FOOD STAMP PARTICIPATION

Unemployment or Business Cycle Condition	Monthly Increase or Decrease in Food Stamp Participants
1. Average of one percent increase in total unemployment rate	50,000 person increase in participation
2. One percent increase in total unemployment rate from 4 percent to 5 percent	26,000 person increase in participation
3. One percent increase in total unemployment rate from 9 percent to 10 percent with insured unemployment rate at 3 percent	55,000 person increase in participation
4. One percent increase in total unemployment rate from 9 percent to 10 percent with insured unemployment rate at 6.75 percent	46,000 person increase in participation

flow of cases. Rising unemployment then has a ripple effect although there is no evidence that the ripple was long-lived--lagged unemployment effects greater than one quarter in length were not significant. But these points imply that the monthly figure of 50,000 persons added to the food stamp caseload per one percentage point rise in the unemployment rate is an average scenario subject to qualifications and based on economic circumstances.

Preliminary Results from the Case Record Survey. Preliminary analysis has begun on the sample of actual records from food stamp case record survey conducted for The Urban Institute by Market Facts, Inc. This survey yields the most disaggregated data possible on food stamp cases. Early results confirm that the average profile of food stamp participants is sensitive to the business cycle. The proportion of the caseload reporting some earnings shows a tendency to rise around the trough of the business cycle, although this effect is not marked. This indicates that as more and more workers are laid off during worsening business conditions, more households with former workers tend to participate in the program. These would-be earners may be more likely to pick up odd earnings from time to time to help tide the household through a spell of unemployment by the principal earner. The average reported gross income of participating households with earnings shows a marked decline around the trough of the 1981-1983 recession, while the average gross income for the caseload as a whole is not affected. This confirms that the recession had an impact on food stamp households with earnings. Further analysis of these case records is underway and will be valuable in confirming the role of local, as well as national, labor market conditions in determining entry and exit from the program.

Estimating the Total Impacts of the 1981-1982 Recession

A question frequently arises as to the overall impact of the 1981-1982

recession on the food stamp caseload and, therefore, on total costs. Several such estimates were attempted as part of the study, but such an estimation exercise carries with it a very serious danger and results must be interpreted with caution.

The Food Stamp Program has been shown to be highly sensitive to economic conditions. While this study indicates that the response is more complex than previously thought, the results just discussed indicate that the economy's impact on food stamp caseloads is nevertheless quite strong.

In order to estimate the specific impacts of the 1981-1982 recession on the number of food stamp recipients, it is necessary to estimate a counterfactual economic scenario. That is, it is necessary to assume what the non-recessionary economy would have looked like. This is not as easy as it might seem. The economic assumptions must at least be consistent with what occurred prior to the recession: it is unrealistic to assume that the unemployment rate moved from 7.5 percent in 1981 to 3 percent in 1982, for example. Furthermore, some explicit assumptions must be made about monetary and fiscal policy and, to some extent, about the international economy.

Given the sensitivity of the Food Stamp Program to the economy, the results of a counterfactual analysis are almost entirely dependent on the counterfactual used. A counterfactual which shows a full-employment, non-inflationary economy will undoubtedly show that the recession has a very significant impact. But since no feasible combination of monetary and fiscal policy would have led to such an economy, it is an exercise more in fantasy than in fact.

In order to get around the infeasibility issue, an analysis was completed for this study which assumed two simple changes to the economy in 1982. First, it was assumed that the average 1981 unemployment rate would be

sustained throughout 1982. Second, it was assumed that the business cycle peaks and troughs described earlier did not occur. All other policy, demographic and economic variables in 1982 remained unchanged.

These assumptions were then used in the net flows model to estimate the affect on the number of recipients in 1982. The results imply that the 1982 economic conditions increased the number of food stamp recipients by approximately 70,000 per month. If this effect were sustained throughout 1982, the actual number of recipients was about 840,000 higher than it would have been if 1981 economic conditions had prevailed in 1982. Total costs were therefore about \$750 million - \$1 billion higher than they would have been. Again, it must be remembered that alternative economic assumptions for the counterfactual may give significantly lower or higher results of the recession's impacts.

Conclusion

This chapter has provided an extensive discussion of the interaction between the Food Stamp Program and the economy. It has shown that the program did not respond as expected to the recession of 1981-1982 principally because the recession was different from previous ones. Furthermore, it has shown the complexity of the relationship between economic conditions and program caseloads.

There is little doubt that the effects on the Food Stamp Program associated with variables such as the unemployment rate, duration of unemployment, the poverty rate, and business cycle conditions remain strong, even though they have been changing through time. In particular, the labor market conditions associated with the 1981-1982 recession and its aftermath exerted considerable upward pressure on the food stamp caseload and the

recession may have increased the number of recipients by 840,000 and the costs by \$750 million to \$1 billion in 1982.

Of the factors discussed so far in this report, it is clear that the economy is the most significant one. The next chapter of this report discusses one final factor which potentially can affect food stamp costs and caseloads: changes in the policies of other transfer programs.

Chapter VI

The Food Stamp Program and Other Transfer Programs

Legislative changes, demographic trends and economic cycles can have a strong influence over food stamp recipients. But because the program includes income from all sources in determining benefits, the policies in other transfer programs can be important as well.

A full understanding of the impacts of OBRA, the Farm Bill and the 1982 Amendments on the Food Stamp Program therefore requires an analysis of the impacts of legislative change in other related social welfare programs. The food stamp legislation was accompanied by significant changes in the major cash assistance programs including Aid to Families with Dependent Children (AFDC), Supplemental Security Income (SSI), Social Security, and Unemployment Insurance (UI). These changes influence the Food Stamp Program independent of changes in the program itself, the economy, or other demographic factors. As explained in Chapter II, the Food Stamp Program considers all cash income in the determination of eligibility and benefit levels. Thus, legislation which affects other program benefits can also affect food stamp eligibility and food stamp benefits for program participants.

Multiple program participation is common for food stamp participants. An analysis of participants in 1979 shows that more than 80 percent of all food stamp households over a 3-month period also received benefits from AFDC, Social Security, SSI, Medicaid, or Unemployment Insurance.¹ Thus, a direct interaction occurs between the Food Stamp Program and these programs (other than Medicaid) because food stamp benefits will rise (or fall) in response to

1. M. MacDonald. "Multiple Benefits and Income Adequacy for Food Stamp Participant and Nonparticipating Households." Food and Nutrition Service, USDA, February, 1983.

losses (or gains) in these program benefits. An indirect interaction also occurs because the availability of one of these other income sources may obviate the need for food stamp benefits. This is particularly true for Social Security and Unemployment Insurance benefits. Benefits provided by these non-means tested social insurance programs are considerably higher than those provided by the means-tested programs.¹ Only about 10 percent of households with UI benefits during the course of a year also have food stamps, compared to about 75 percent for AFDC families.²

This chapter explores the role played by legislative changes in the major cash assistance programs (AFDC, SSI, Social Security and UI) in changes in the food stamp caseload and benefits during the OBRA period. There were three major pieces of legislation which affected these programs during the 1981-1983 period.³ These were:

1. The Omnibus Budget Reconciliation Act (OBRA) of 1981 (Public Law 97-35, enacted in August 13, 1981),
2. The Tax Equity and Fiscal Responsibility Act (TEFRA) of 1982 (Public Law 97-248, enacted September 3, 1982), and
3. The Social Security Amendments of 1983 (Public Law 98-21, enacted April 20, 1983).

OBRA was the most far-reaching of these pieces of legislation in the sense that changes were enacted that affected all four of these income security programs. The 1982 TEFRA legislation primarily affected tax expenditures, but it also enacted a new federal supplemental UI benefits

1. This point is illustrated by the fact that the average maximum Unemployment Insurance benefit is more than twice the average maximum AFDC benefit for a family of three (\$668 per month versus \$321 per month in 1983).

2. See Congressional Budget Office, "Interactions Among Programs Providing Benefits to Individuals: Secondary Effects on the Budget," May 1982.

3. There were other minor pieces of legislation during the period such as the 1981 Social Security Amendments which are accounted for in this analysis. A more recent piece of legislation, the Deficit Reduction Act of 1984 (P.L. 98-369), is not considered here.

program and made minor changes to AFDC and SSI. The 1983 Social Security Amendments represented a major effort to rectify both short- and long-term financing problems in Social Security. This legislation also included changes in SSI and Unemployment Insurance benefits.

The analysis of the effects of this legislation on the Food Stamp Program shows that there is no evidence that there were significant interaction effects. The one exception is that if UI benefits had been more widely available during the period, the number of households with food stamp benefits would have been lower. Data from the Food Stamp Quality Control surveys, the new case record survey, and a microsimulation model of transfer programs all support this conclusion.

At the time that the OBRA legislation was being considered, the program interaction effects were expected to be larger. The analyses presented here have the benefit of hindsight since household economic circumstances during 1982 and 1983 can now be observed. In previous analyses of the legislation by both FNS and CBO, synthetic data had to be developed in order to project the effects of the legislation. Projections are, of course, sensitive to the underlying economic assumptions. At the time of the OBRA legislation the rate of price inflation was expected to be much higher than actually was the case, but the unemployment rate was expected to be lower. The relatively low inflation rate softened the impact of many of the legislative changes in these income transfer programs. On the other hand, the higher unemployment rate intensified the significance of the interaction between the Unemployment Insurance Program and the Food Stamp Program.

The discussion below explains why the program interaction effects were slight during the OBRA period. The effects of the legislation in each of the

major social assistance programs--AFDC, SSI, Social Security, and Unemployment Insurance--are considered separately.

Aid to Families with Dependent Children

The 1981 OBRA legislation made significant changes in the AFDC program, particularly with regard to the treatment of earnings. Before OBRA, the first \$30 of monthly earnings and 1/3 of the remainder were disregarded from household income, and all work-related expenses were deducted from the remaining earnings. OBRA placed a \$75 limit on work-related expenses, applied the "30 and 1/3" rule after work expense deductions, and limited this disregard to the first four months of earnings. OBRA also eliminated eligibility for households with gross incomes above 150 percent of the states' need standards, reduced the asset limit, introduced broader consideration of other household income (from stepparents and lump sum payments), and eliminated eligibility for strikers, children over age 18 attending school, and women pregnant less than 6 months.

The OBRA legislation had important implications for the AFDC program. It is estimated that about 400,000 families lost eligibility, and another 300,000 lost some of their benefits as a result of the legislation.¹ The majority of the families affected had earnings. In fact, program data show the percentage of AFDC families with earnings declined by 50 percent (from 11.5 percent of all AFDC families in May 1981 to 5.6 percent in May 1982).²

However, these AFDC program effects would not have been expected to have large effects on the Food Stamp Program. The AFDC caseload affected by the

1. Background Material and Data on Programs Within Jurisdiction of the Committee on Ways and Means, Committee on Ways and Means, U.S. House of Representatives, February 21, 1984.

2. Weder, Wilbur. "Current AFDC Characteristics and Analysis of Selected Caseload Changes Between May 1981 and May 1982," in Proceedings: 23rd National Workshop on Welfare Research and Statistics, July, 1983.

OBRA legislation was a fairly small portion of the total food stamp caseload. Most of the affected group retained their food stamp eligibility. The only exceptions to this were those units whose gross income was greater than the food stamp eligibility limit (130% of poverty). One would expect a change, however, in the characteristics of the food stamp caseload. That is, fewer food stamp households would have AFDC benefits. In addition, a small effect on average food stamp benefits would be expected since average benefits would increase to compensate for smaller AFDC benefits.

In general, the findings of this study support these prior expectations. There was no significant change in the food stamp caseload as a result of the OBRA legislation. The data do show, however, that the percent of the food stamp caseload with AFDC benefits actually increased during the same period that the AFDC caseload decreased. While this increase was not statistically significant, it is a counterintuitive result, explained in part by an increase in the rate of participation in the Food Stamp Program for AFDC households. The OBRA reductions in AFDC benefits may have played a small part in this trend, since a reduction in AFDC benefits might be expected to induce more families to apply for food stamps. The results also show that the interaction effect on food stamp benefits was in the direction expected, but very slight. On average, food stamp benefits increased by .7 percent in 1983 because of the AFDC benefit reductions. The discussion below reviews the study's findings on the effects of the AFDC legislation on the food stamp caseload and benefits.

Effect on the Food Stamp Caseload

Table 6.1 summarizes data on the characteristics of food stamp households with AFDC benefits from the Food Stamp Quality Control surveys during the OBRA period. Forty percent of the food stamp caseload (3.1 million households) had

Table 6.1

INCOME CHARACTERISTICS OF FOOD STAMP CASELOAD

	<u>August 1981</u>	<u>February 1982</u>	<u>August 1982</u>	<u>February 1983</u>
Total Food Stamp Caseload (000)	7,698	7,565	7,487	8,052
Percent with AFDC Income	40.1	44.5	42.6	43.5
Percent of AFDC Cases with Earnings	12.8	9.5	8.1	7.8
Percent with SSI Income	19.0	17.0	17.8	15.1 ^a
Percent with Social Security Income	19.1	18.2	18.5	16.3
Percent with Unemploy- ment Insurance	1.0	1.5	1.6	5.2

SOURCE: Based on data abstracted from the Food Stamp Quality Control samples for dates indicated. 1981 and 1982 figures based on analysis of these data by The Urban Institute, and may differ slightly from previously published estimates. 1983 figures are preliminary estimates released in mimeograph form by FNS.

NOTE: Blank cells indicate data are not available.

a. February 1983 excludes households receiving only SSI state supplements.

AFDC benefits in August 1981, and 12.8 percent of these (400,000 households) had earnings.¹ Thus, the OBRA legislation which affected AFDC families with earnings, potentially affected 5 percent of the food stamp caseload.

By August 1982 the percent of the food stamp caseload with AFDC benefits increased to 42.6 percent, even though the AFDC caseload had declined by about 400,000 families during the same period. The increase in the percent of food stamp households with AFDC is not statistically significant, however, and represents only a slight increase in the absolute number of households with AFDC since the overall food stamp caseload declined. Nevertheless, a decline in the number of AFDC households would have been expected unless all of the families who left the AFDC program were not participating in the Food Stamp Program. This result is partially explained by an increase in the Food Stamp Program participation rate for AFDC households. The percent of the total AFDC caseload with food stamp benefits increased from 80 percent in August 1981 to 91 percent in August 1982.² This increase in the percent of AFDC families receiving food stamps may simply reflect the fact that the AFDC eligibility changes affected households with relatively high incomes. If these households participated in the Food Stamp Program at a lower than average rate, then the average participation rate for households who remained on AFDC would increase.

Food Stamp Program participation rates may also have increased for AFDC households in response to a trend toward lower real AFDC benefits. That is, more families may have applied for food stamps to offset real income declines,

1. These figures were computed by The Urban Institute from the Food Stamp Quality Control Surveys and may differ slightly from USDA published estimates.

2. The percents were calculated as the total number of food stamp households with AFDC (shown in Table 6.1) divided by the total number of AFDC families for the same months.

which occurred both because the 1981 OBRA legislation decreased benefits for earners, and because state benefit levels have not kept pace with increases in the cost-of-living.¹ Both factors, but particularly the second since it affected all AFDC beneficiaries, contributed to a decline in real AFDC benefits during this period.

Table 6.2 shows the results of two counterfactual simulations which illustrate the effects of the AFDC policy changes on the food stamp caseload. One counterfactual simulates the pre-OBRA AFDC and Food Stamp Program rules, and the other simulates the post-OBRA AFDC rules with the pre-OBRA Food Stamp Program rules. Thus, the difference between the two simulations can be attributed to the AFDC policy changes.

The simulation results demonstrate that, as expected, the changes in the AFDC eligibility rules had an insignificant effect on the total food stamp caseload. The caseload declined by 0.5 percent. The number of food stamp households with AFDC benefits declined by 3.2 percent, and the number with earnings declined by 1.3 percent. The decrease in the number of AFDC families is significant but not unexpected. One result of OBRA was to reduce the number of families on AFDC. But many of these families retained eligibility for food stamps because of the loss of AFDC income. While OBRA did therefore cause a decline in the number of families on AFDC, the net effect on the food stamp caseload was muted by the interaction between the two programs. The simulation results confirm these prior expectations regarding the effect of the AFDC changes on the food stamp caseload.²

1. From July 1980 to July 1983 only four states made AFDC benefit adjustments that met or exceeded increases in the Consumer Price Index.

2. The simulation model assumes that families with AFDC benefits have higher rates of Food Stamp Program participation than families with only earnings. Thus, the model predicts that some of the AFDC households with earnings who left the AFDC program also left the Food Stamp Program. This assumption is based upon historical analysis of Food Stamp Program participation patterns. See MacDonald (1977) and MacDonald (1983).

Table 6.2

ESTIMATES OF THE EFFECTS OF THE AFDC OBRA
LEGISLATION ON THE FOOD STAMP CASELOAD AND BENEFITS IN 1983

Households with Benefits Sometime During the Year
(Numbers in Thousands)

<u>Food Stamp Participation Households</u>	<u>Pre- OBRA¹</u>	<u>Post- OBRA²</u>	<u>Percent Change</u>
Total caseload	9,955	9,909	- .5%
Number with AFDC benefits	3,661	3,543	-3.2
Number with earnings	5,445	5,374	-1.3

Average Benefits During the Year

<u>Food Stamp Participant Households</u>	<u>Pre- OBRA¹</u>	<u>Post- OBRA²</u>	<u>Percent Change</u>
Average food stamp benefit	\$1,157	\$1,165	+ .7%
Average AFDC benefit for households with income	\$3,354	\$3,293	-1.8
Average gross income for households with AFDC	\$7,362	\$7,208	-2.1

SOURCE: Simulated estimates on March 1984 Current Population Survey.

NOTES: 1. Pre-OBRA counterfactual simulation includes pre-OBRA rules for AFDC, SSI, Social Security, and Food Stamps.

2. Post-OBRA counterfactual simulation includes post-OBRA rules for AFDC, but pre-OBRA rules for all other programs.

Effects on Benefit Levels. Data from three sources, the microsimulation of the effects of the AFDC policy changes, the Food Stamp Quality Control surveys, and the new case record survey, indicate that the AFDC legislation made no significant difference to average food stamp benefit levels. For example, the bottom of Table 6.2 shows that the average food stamp benefit increased by .7 percent as a result of the AFDC policy changes. There were corresponding decreases of about 2 percent in average AFDC benefits and gross incomes for households with AFDC and food stamps in the post-OBRA simulation.

Program data on the average incomes and benefits of households with AFDC and food stamps during the OBRA period are shown in Table 6.3. These data indicate stable gross income levels for AFDC households from August 1981 to August 1982. There was essentially no change in the average food stamp benefit until February 1983. Thus, during the 1981-1982 period when Food Stamp Program rules were held constant, but the new AFDC eligibility rules were implemented, there was no significant change in average food stamp benefits.¹ Of course, there may have been some distributional changes which these data would mask.

The case record survey data also demonstrate that there was little change in average food stamp benefit levels for households with AFDC income during the October 1981 to March 1982 period when the AFDC policy changes were implemented (Figure 6.1). Average benefits did not increase significantly until the October 1982 increase in the food stamp allotment.

Figure 6.1 also indicates that the average gross income levels of AFDC households with food stamps were increasing after implementation of the OBRA

1. The cost of living adjustment in the food stamp allotment was delayed until October 1982 and adjustments to deductions were delayed until October 1983. Most states completed the implementation of the AFDC OBRA rules between October 1981 and March 1982.

Table 6.3

AVERAGE INCOME AND BENEFITS FOR FOOD STAMP HOUSEHOLDS WITH
VARIOUS INCOME SOURCES

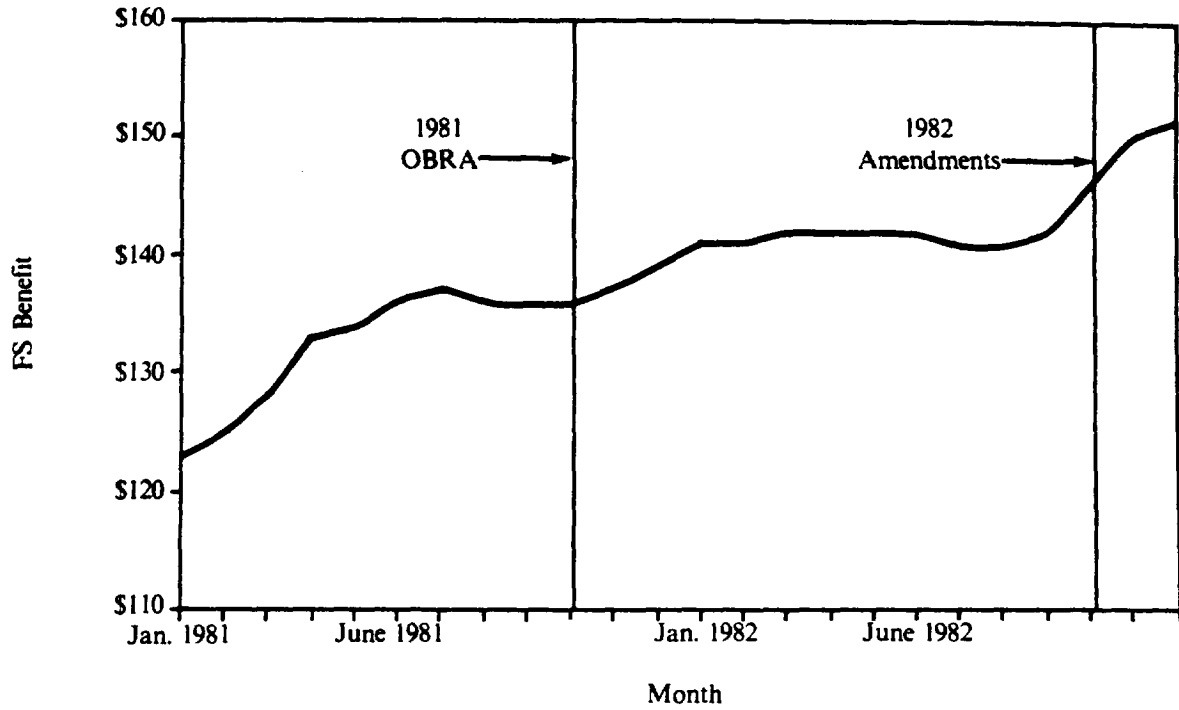
	<u>August 1981</u>	<u>February 1982</u>	<u>August 1982</u>	<u>February 1983</u>
All Food Stamp Households:				
Average Gross Income	\$349	\$345	\$358	\$376
Average Food Stamp Benefit	103	109	103	127
Households with AFDC:				
Average Gross Income	\$388	\$384	\$392	\$397
Average Food Stamp Benefit	135	138	135	158
Average AFDC Income	284	289	292	326
Households with SSI: ^a				
Average Gross Income	\$345	364	\$376	\$401
Average Food Stamp Benefit	55	54	45	66
Average SSI Benefit	181	185	198	205
Households with Social Security:				
Average Gross Income	\$367	\$379	\$393	\$416
Average Food Stamp Benefit	53	57	51	63
Average Social Security Benefit	282	258	273	303

SOURCE: Based on data abstracted from the Food Stamp Quality Control samples for dates indicated. 1981 and 1982 figures based on analysis of these data by The Urban Institute. 1983 figures are preliminary estimates released in mimeograph form by FNS.

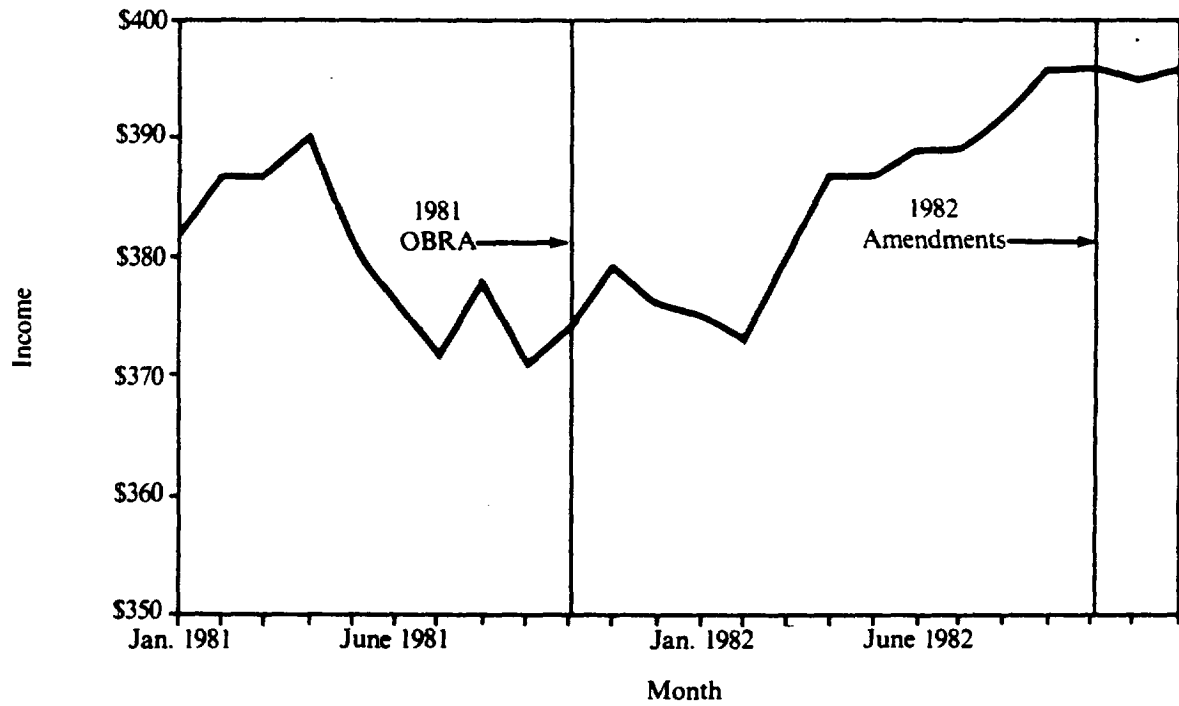
NOTE: a. February 1983 excludes households receiving only SSI state supplements.

Figure 6.1

**Food Stamp Benefit Level
For AFDC Households, 1981 - 1982**



**Average Gross Income
For AFDC Households, 1981 - 1982**



Source: Case record abstraction survey undertaken by The Urban Institute Preliminary data.

AFDC legislation.¹ This corresponds to a similar increase in average gross income observed in the AFDC Quality Control Survey data. The AFDC data show that the percent of AFDC units with other non-earned income increased from 6 percent in May 1981 to 8.3 percent by mid-1983.² In addition, the average amount of unearned income increased by 44 percent during the same period. These family income changes were accompanied by a significant increase in the percent of AFDC units with 2 or more adult recipients. (This type of unit increased from 7 percent of all AFDC units in May 1982 to 11 percent in March 1983.) These data indicate that there was some compositional change in the AFDC caseload after early 1982. The fact that the average food stamp benefit did not decrease in response to the average increase in gross income during this period is perplexing but is likely due to the complex interactions of the AFDC and Food Stamp programs. One possible explanation is that increases in gross incomes in AFDC were due to newly reported earnings. The food stamp disregards would have muted the effect of this increase on food stamp benefits since these disregards would reduce the income counted in the determination of benefits.

Additionally, AFDC data show that average family size in the AFDC program was increasing over this period. This may have happened for a number of reasons but since larger families are eligible for larger food stamp benefits, it certainly created upward pressure on the average food stamp benefit.

Supplemental Security Income

Significant changes to the SSI program did not occur until 1983 with the passage of the Social Security Amendments. The 1981 OBRA and 1982 TEFRA legislation made only minor adjustments to program rules. The 1983 amendments

1. The steepest increase (6 percent) occurs from February 1982 to October 1982.

2. Unpublished data from the AFDC Quality Control Surveys was supplied by the Office of Family Assistance, Social Security Administration.

delayed the regularly scheduled COLA from July 1983 to January 1984, but this was coupled with a one-time increase in SSI benefits effective in July 1983. As a result, federal benefits levels were set at higher levels than they would have been with the regular COLA increase. For example, the maximum benefit for a single individual increased to \$304 in July 1983 whereas the benefit would have been \$294 with the regular COLA award.

The SSI benefit increase was intended to protect low-income elderly and disabled persons from the general Social Security COLA delay also included the 1983 Amendments. The federal SSI payment provides an income floor for all elderly and disabled persons, and the monthly benefit is the difference between other countable income and the floor. Thus, the SSI benefit increase made up the cash income lost from the Social Security COLA delay for low-income persons participating in both programs.

The SSI legislation would not have had significant impacts on the Food Stamp Program during the OBRA period. The 1983 benefit increase would not have affected the food stamp eligibility of SSI recipients since the guarantee level remained below the Food Stamp Program income eligibility standards. A small effect on food stamp benefits would be expected, however, since the food stamp benefits would have declined to offset the SSI benefit increase.

The microsimulation analysis of households with SSI benefits who were also eligible for food stamps during 1983 illustrates the effects of the 1983 amendments. The data presented in table 6.4 show no change in the food stamp caseload when the post-OBRA rules are compared to the pre-OBRA rules, holding constant all other factors.¹ The number of food stamp households with SSI increased, reflecting the fact that higher SSI guarantees will tend to bring more households onto the SSI caseload. On average, SSI benefits are less than

1. The pre-OBRA comparison includes pre-OBRA rules in the Food Stamp Program as well as SSI.

Table 6.4

ESTIMATES OF THE EFFECTS OF THE SSI LEGISLATION ON THE
Food STAMP CASELOAD AND AVERAGE BENEFITS DURING 1983Households with Benefits Sometimes During the Year
(Numbers in Thousands)

<u>Food Stamp Participant Households</u>	<u>Pre- OBRA¹</u>	<u>Post- OBRA²</u>	<u>Percent Change</u>
Total with food stamps	9,909	9,901	--
Number with SSI benefits	2,098	2,141	+2.0
Average Benefits During Year			
<u>Food Stamp Participant Households</u>	<u>Pre- OBRA¹</u>	<u>Post- OBRA²</u>	<u>Percent Change</u>
Average food stamp benefit	\$1,165	\$1,157	-.7%
Average SSI benefit	\$2,485	\$2,507	+.9
Average gross income for households with SSI	\$5,415	\$5,470	+1.0

SOURCE: Simulated estimates based on March 1984 Current Population Survey.

1. Pre-OBRA counterfactual simulation includes pre-OBRA rules for AFDC, SSI, Social Security, and Food Stamps.

2. Post-OBRA counterfactual simulation includes post-OBRA rules for SSI, but pre-OBRA rules for all other programs.

1 percent higher in the post-OBRA simulation, and the decline in average food stamp benefits is .7 percent.

Social Security

The 1981 OBRA made some changes to Social Security, but the most important legislation for the program during the 1981-1983 period was the 1983 Social Security Amendments. OBRA eliminated the minimum Social Security benefits, phased-out survivor benefits for college students, and eliminated survivor's benefits for mothers when their youngest child was 16 rather than 18. The minimum benefit, however, was restored by the 1981 Social Security Amendments, and the other provisions were not expected to have a significant impact on low-income families. The 1983 Amendments affected all Social Security beneficiaries with a delay in the COLA from July 1983 to January 1984. This provision had a potential effect on the Food Stamp Program because the normal July COLA increase in Social Security benefits typically lowers average food stamp benefits.¹ Since 16 to 18 percent of food stamp beneficiaries have income from Social Security (Table 6.1), this effect could increase program costs. However, the July 1983 SSI benefit increase would have minimized this effect.

The counterfactual microsimulation results isolate the effects of the Social Security COLA delay during 1983 on the Food Stamp Program. The pre-OBRA Social Security legislation (that is, a COLA award in July 1983) was compared to the post-OBRA legislation, holding constant all other factors. Post-OBRA rules in the SSI program were held constant in order to measure only the net effect of the Social Security COLA delay. These results (Table 6.5) highlight the fact that SSI cushioned to some degree the impact of the COLA

1. The 1982 food stamp amendments included a provision to disregard the Social Security COLA increase for three months (between July and October). This change was designed to prevent a temporary drop in food stamp benefits to elderly recipients. Because the July Social Security adjustment was shifted to January this provision was not implemented.

Table 6.5

ESTIMATES OF THE EFFECTS OF THE SOCIAL SECURITY
LEGISLATION ON THE FOOD STAMP CASELOAD
AND AVERAGE BENEFITS DURING 1983

Households with Benefits During Year
(Numbers in Thousands)

<u>Food Stamp Participant Households</u>	<u>Pre-¹ OBRA</u>	<u>Post-² OBRA</u>	<u>Percent Change</u>
Total with food stamps	9,901	9,938	+.4
Number with Social Security	2,535	2,556	+.8
Number with SSI	2,141	2,191	+2.3

Average Benefits During Year			
<u>Food Stamp Participant Households</u>	<u>Pre-¹ OBRA</u>	<u>Post-² OBRA</u>	<u>Percent Change</u>
Average food stamp benefits	\$1,157	\$1,155	-.2
Average Social Security benefit	\$3,813	\$3,764	-1.3
Average SSI benefit	\$2,507	\$2,481	-1.0
Average gross income for households with Social Security	\$5,857	\$5,871	+.2

SOURCE: Simulated estimates based on March 1984 Current Population Survey.

1. Pre-OBRA counterfactual simulation includes pre-OBRA rules for Social Security, but OBRA rules for all other programs, except food stamps.

2. Post-OBRA simulation includes historic, (post-OBRA) rules for all programs, except food stamps.

delay, on average, for households eligible for food stamps. The food stamp caseload increased slightly (.4 percent) in the post-OBRA simulation, and average food stamp benefits were only slightly lower. Correspondingly, average gross income for households with Social Security benefits was slightly higher in the post-OBRA simulation. Average Social Security benefits declined slightly, but more households had SSI benefits. As would be expected, the Social Security COLA delay caused more eligible households to take advantage of SSI benefits in order to maintain real levels of income.

Unemployment Insurance

The availability of UI benefits was reduced as a result of the legislation during the OBRA period. Availability of benefits to the newly unemployed was reduced through increased eligibility requirements, and through new restrictions in the federal benefits programs. Access to extended benefits for the long-term unemployed was more limited in a relative sense because total benefits were historically low, given the level of unemployment in the period, but also in an absolute sense because the temporary extended benefits program did not fully replace the pre-OBRA program.

These effects were accomplished through a complex set of changes in the UI program. While the UI program is state-based (the state sets regular program eligibility, standards, benefits, and duration), the federal government's role is important particularly during recessionary periods. The federal government provides benefits to ex-servicemen through the unemployment for Ex-Service Members (UCX) program, and it provides extra benefits to persons unemployed due to increased foreign trade through the Trade Adjustment Assistance (TAA) program. In addition, beginning in 1970 with the creation of the Federal-State Extended Benefit (EB) program, the federal government has jointly financed 13 weeks of additional benefits during recessions. The EB program was "triggered" when either state unemployment rates or the national

rate (based on UI claims data) exceeded predetermined thresholds. The federal government also maintains a fund from which state UI programs may obtain loans when claims exceed payroll tax receipts.

The 1981 OBRA legislation increased the state-level EB triggers, eliminated the national trigger, and instituted interest penalties on state loans. In addition, eligibility for TAA and UCX was tightened. In response to the recession experienced subsequent to OBRA, the 1982 TEFRA legislation authorized 6-10 weeks of extended benefits in all states through the Federal Supplemental Compensation (FSC) program. FSC did not fully replace pre-OBRA extended benefits provisions, however. Prior to OBRA all workers would have had access to 13 weeks of EB beginning in April 1982 because the national trigger would have been activated.¹

Aggregate long-term unemployment benefits were low during the OBRA period by historical standards. For example, in real terms 1982-83 benefits to the long-term unemployed were 35 percent less than in the aftermath of the 1973-75 recession.² Lower real benefits were paid despite the fact that long-term joblessness was much more prevalent in 1982-83 compared to the earlier period.³

Households with unemployed members were also affected by state provisions in UI during the OBRA period. On average, states increased their eligibility requirements for UI benefits largely by increasing the amount of earnings required for eligibility. Such requirements increased by about 13 percent in

1. Some workers also had access to EB benefits during the period. For example EB was available on average for 43 percent of calendar year 1982, and for 19 percent of calendar year 1983. Task report 7 explains the extended benefits provisions in the pre- and post-OBRA periods in more detail.

2. Benefits paid under Federal-State Extended Benefits (EB) and Temporary Compensation were \$7.572 billion in 1975-76 and \$4.955 billion in 1982-83, Vroman (1984).

3. The percentage of the civilian labor force unemployed for 27 weeks or longer was 1.28, 1.40, 1.61, and 2.30 in 1975, 1976, 1982, and 1983, respectively.

real terms from 1981 to 1983. These increases could in part be attributed to federal legislation which initiated interest charges on monies borrowed from the federal fund.

The effect of changes in the UI program on the food stamp caseload and benefits payments is difficult to assess because it is primarily indirect. Only about 2 percent of food stamp households have unemployment insurance benefits.¹ Because UI benefits are high and may exceed food stamp eligibility limits, it is the absence of benefits which may cause a family to seek assistance from the Food Stamp Program.² Of course, this effect is dampened to the extent that these households have alternative financial resources, such as other working family members or assets.

As Chapter V pointed out, the Food Stamp Program is sensitive to the level of unemployment. Moreover, the impact of the unemployment rate on the food stamp caseload is muted when the insured unemployment rate is high. The macroeconomic results also pointed out that the caseload growth exhibited a delayed response to the 1981-82 recession. The caseload peaked at 22.6 persons in March 1983, but the recession bottomed out in the fourth quarter of 1982. The mean duration of unemployment also rose after the recession's trough--the average was 20 weeks in 1983, up from 13.7 weeks in 1981 and 15.6 weeks in 1982.

The sensitivity of the Food Stamp Program to UI benefit availability can be demonstrated using microsimulation techniques. Table 6.6 shows Food Stamp Program participants in 1983, given historic UI legislation and a scenario which assumes that an additional \$5.4 billion had been allocated for UI

1. In February 1983 the percentage of the food stamp caseload with UI benefits increased to 5 percent (see table 6.1).

2. The maximum UI benefit exceeds the food stamp gross income eligibility limit for an individual in 44 states, for a family of 2 in 29 states, and for a family of 3 in 11 states.

Table 6.6

ESTIMATES OF THE EFFECTS OF AN INCREASE IN
THE NUMBER OF UNEMPLOYED PERSONS WITH
UNEMPLOYMENT INSURANCE BENEFITS DURING 1983

<u>Program Estimate</u>	<u>Post- OBRA¹</u>	<u>Unemployment Insurance Counterfactual²</u>	<u>Percent Change</u>
UI Benefits (Billions of \$)	\$19.6	\$25.0	+ 27.6
Persons With UI Benefits (000)	10,104	12,574	+ 24.4
<u>Food Stamp Participant Households</u>			
Total, with food stamps (000)	9,571	8,763	- 8.4
Total food stamp benefits (Billions of \$)	\$10.999	\$9.921	- 9.8

SOURCE: Historical post-OBRA UI benefits as reported in March, 1984 Current Population Survey. UI counterfactual and Food Stamp benefits are simulated estimates.

1. Historical simulation, includes post-OBRA legislation in all programs, including Food Stamps.

2. Counterfactual simulation assumes pre-OBRA legislation in federal UI programs (UCX, TAA) and an increase in extended benefits.

benefits.^{1,2} In the counterfactual simulation, 2.5 million more unemployed workers would have had UI benefits during 1983.³ Correspondingly, the food stamp caseload decreased by about 800,000 households in the more generous UI benefits scenario, and food stamp benefits decreased by \$1 billion.

This simulation illustrates the sensitivity of the Food Stamp Program to Unemployment Insurance policies. As demonstrated here and in the net flows model, the impact of unemployment on the Food Stamp Program is cushioned through benefits provided by UI. One reason why the program has a lagged response to increases in the unemployment rate is that many workers have access to at least 26 weeks of UI benefits. As a recession deepens, however, more spells of unemployment increase beyond the regular program duration. The amount of upward pressure on the food stamp caseload exerted by regular UI benefit exhaustions, depends on the availability of the next tier of UI benefits. The reductions in access to regular UI benefits and extended benefits increased the food stamp caseload and benefits during the OBRA period. The simulation results provide one estimate of the size of this effect.

Conclusions

The general conclusions reached in the analysis of how legislation in other government transfer programs affected the Food Stamp Program during the OBRA period are the following:

1. Vroman (1984) estimated that UI benefits under special federal programs were \$1 billion lower because of the OBRA legislation, and extended benefits were about \$4.4 billion lower as a result of this legislation.

2. Unemployment Insurance benefits are significantly underreported on the CPS. The reported CPS amount (\$19.6 billion) represents only 75 percent of total benefits paid in 1983. Correction for underreporting was beyond the scope of this project.

3. The model distributed the additional benefits to unemployed workers without benefits depending on their age, race, sex and historic benefit reciprocity rates for those groups. See Task Report 7 for a fuller discussion of this methodology.

- o The AFDC OBRA legislation had no significant effect on the food stamp caseload or benefits.

A microsimulation analysis of the effects of the AFDC policy changes showed an insignificant (.5 percent) decrease in the food stamp caseload, and a slight (.7 percent) increase in average food stamp benefits during calendar year 1983. Data from the Food Stamp Quality Control surveys and the case record survey showed that there were no significant changes in average food stamp benefits (or gross income levels) for AFDC households after the OBRA legislation was implemented. The number of food stamp households with AFDC benefits increased during the OBRA period, however, despite the fact that the total AFDC caseload decreased. Thus, program data indicate that the percentage of AFDC households with food stamps increased during the 1981-1983 period.

- o In general, the SSI program had a slight negative effect on the food stamp benefits but no effect on the caseload.

The 1983 Social Security Amendments increased SSI benefit levels. As a result, average food stamp benefits decreased by .7 percent. Food stamp benefits decreased for SSI recipients to offset part of the SSI benefit increase. There was no change in the food stamp caseload, however, because the SSI benefit increase did not affect program eligibility.

- o The Social Security program had no significant impact on either the food stamp caseload or benefits.

The 1983 Social Security Amendments delayed the regularly scheduled COLA for all beneficiaries for 6 months. However, the concurrent SSI benefit increase offset the COLA delay, on average, for households eligible for food stamps. Neither the food stamp caseload nor the average food stamp benefit changed significantly as a result of the Social Security COLA delay.

- o The combined impact of the AFDC, SSI and Social Security legislation on the Food Stamp Program was insignificant.

In general, the small individual program effects tended to cancel each other, and if all changes are taken into account, the food stamp caseload and average benefits decreased by .2 percent. These changes have no statistical significance.

o Legislation in the Unemployment Insurance Benefits program increased the food stamp caseload and costs.

Unemployment insurance plays an important role in cushioning the effect of increasing unemployment rates on the Food Stamp Program. The OBRA legislation limited access to benefits under the special federal programs and under the extended benefits program. Subsequent legislation enacted a temporary compensation program for the long-term unemployed, but it did not fully replace previous extended benefits programs. In addition, in about half of the states, eligibility requirements for regular UI benefits were increased. The net effect of these UI policy changes was a significant decrease in the number of unemployed with UI benefits and an increase in the number of households with food stamps. One estimate shows that a 24 percent increase in the number of persons with UI benefits would have decreased the number of households with food stamps by 800,000. Food Stamp Program costs would have decreased by \$1 billion, but UI program costs would have increased by \$5.4 billion.

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THE EFFECTS OF LEGISLATIVE
CHANGES IN 1981 AND 1982
ON THE FOOD STAMP PROGRAM
VOLUME II

TECHNICAL APPENDICES

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APPENDIX A
SPECIFIC LEGISLATIVE CHANGES TO
THE FOOD STAMP ACT, 1981 - 1982
(reprinted from the FNS Interim Report to Congress)

1. Omnibus Budget Reconciliation Act of 1981 (P.L. 97-35; enacted August 13, 1981)

A. Measures to Control Program Costs

Sec. 101 Family Unit Requirement

- o Children living with nonelderly parents are required to file for food stamp benefits as a single unit. This stipulation prevents children and parents who share a residence from claiming separate household status on the basis of separate food purchases and meal preparation. (The "food unit" test continues to determine all other household composition situations.)

Sec. 102 Boarders

- o The provision for the eligibility of boarders is deleted.

Sec. 103 Adjustment of the Thrifty Food Plan

- o The adjustment of the basic guarantee (the Thrifty Food Plan) is delayed from January 1982 (and each January thereafter) to April 1982, July 1983, and October 1984 (and each October thereafter). Adjustments are to reflect changes in the cost of the Thrifty Food Plan in the 15-month period ending 3 months before the date of the adjustment.

Sec. 104 Gross Income Eligibility Standard

- o The income eligibility test for households without an elderly or disabled member is changed from a net income standard equal to 100 percent of the income poverty guidelines to a gross income standard equal to 130 percent of these guidelines.

Sec. 105 Adjustment of Deductions

- o The adjustment of the standard deduction and the dependent care/ excess shelter deduction limit is delayed from January 1982 (and each January thereafter) until July 1983, October 1984, and each October thereafter.
- o Homeownership costs are removed from the price indices which serve as the basis for these adjustments.

Sec. 106 Earned Income Deduction

- o The earned income disregard is lowered from 20 percent to 18 percent of earnings.

Sec. 107 Retrospective Accounting

- o Effective October 1, 1983, household income (except for migrant farmworkers) must be determined on a retrospective basis for the purpose of establishing benefit levels.
- o Eligibility may be determined prospectively or retrospectively.
- o Initial allotments to newly certified households are to be supplemented to prevent serious hardship.
- o USDA may waive the provisions of this section to permit a State to calculate income for food stamp purposes in the same fashion it uses for AFDC.

Sec. 108 Periodic Reporting

- o Effective October 1, 1983, certain households are required to report on their circumstances each month. All households with earners, potential earners, or work registrants, or subject to AFDC monthly reporting must file monthly reports. Exemptions are provided for migrant farmworkers and households in which all members are elderly or disabled and do not earn income.

Sec. 109 Eligibility of Strikers

- o Households with strikers are ineligible unless eligible immediately before the strike.
- o No household may receive increased benefits because of a strike lowering its income.

Sec. 110 Prorating First Month's Benefits

- o Initial allotments are prorated from the date of application. Previously, newly certified households got a full month's allotment for the month of application regardless of the date of application.

Sec. 111 Outreach

- o State agency outreach requirements are abolished.
- o Federal administrative cost sharing funds may not be used for outreach.

Sec. 113 Waiving and Offsetting Claims, Improved Recovery of Overpayments

- o USDA may recover claims against States by reducing administrative cost sharing funds.
- o States may recover fraud and nonfraud claims against households (except those caused by State agency error) by reducing coupon allotments.

Sec. 115 Repeal of Increases in Dependent Care Deductions for Working Adults and Medical Deductions for the Elderly and Disabled.

- o The Act repeals two liberalizations of the income deduction structure enacted by the 1980 amendments to the Food Stamp Act and scheduled for implementation on October 1, 1981.
- o One change would have created a deduction for dependent care expenses up to \$90 separate from the excess shelter cost deduction.
- o The other change would have lowered the threshold for the medical expense deduction from \$35 to \$25 and counted the medical costs of nonelderly, nondisabled spouses toward the deduction.

Sec. 116 Puerto Rico Block Grant

- o Puerto Rico's participation in the Food Stamp Program is terminated as of July 1, 1982.
- o Puerto Rico will receive an \$825 million block grant (\$206.5 million for the last quarter of Fiscal Year 1982) for assistance to needy persons.

B. Measures to Strengthen Program Administration

Sec. 112 Disqualification Penalties for Fraud and Misrepresentation

- o The basis for disqualification is broadened to include violations of State statutes.
- o Disqualification penalties for intentional program violations are increased to 6 months for the first offense, 1 year for the second offense, and permanently for the third offense.
- o No household may receive increased benefits because a member is disqualified.
- o States must proceed against alleged violators either through administrative hearings or judicial action.

Sec. 114 States' Share of Collected Claims

- o States may retain 50 percent of all fraud claims and 25 percent of all nonfraud claims (except those caused by State agency error).

2. Food Stamp and Commodity Distribution Amendments of 1981 (P.L. 97-98; enacted December 22, 1981)

A. Measures to Control Program Costs

Sec. 1304 Adjustment of the Thrifty Food Plan

- o The adjustment scheduled for April 1982 is delayed until October 1982. The adjustment will be based on changes in the cost of the Thrifty Food Plan in the 21-month period ending June 30, 1982. The July 1983 adjustment is moved to October 1983, and will be based on June 1983 prices.

B. Measures to Strengthen Program Administration

Sec. 1302 Household Definition

- o The exclusion of elderly parents from the parent/child single household rule (section 101 of OBRA) is broadened to include disabled parents.

Sec. 1303 Alaska's Thrifty Food Plan

- o USDA is required to establish separate Thrifty Food Plans for urban and rural Alaska.

Sec. 1305 Reimbursement Exclusion

- o No portion of an AFDC grant attributable to work or child care expenses may be considered a reimbursement excluded from gross income.

Sec. 1306 Energy Assistance Payments; Excluded Payments of Other Programs

- o The criteria for determining excludable State and local energy assistance is tightened.

Sec. 1307 Disallowance of Deductions for Expenses Paid by Vendor Payments

- o Expenses met by third-party payments may not be deducted from income.

Sec. 1308 Attribution of Income and Resources of Sponsored Aliens

- o A portion of the income and resources of an alien's sponsor is deemed available to the alien.

Sec. 1309 Resources

- o The statutory freeze on resource regulations ~~on vehicles~~ is removed.

Sec. 1310 Annualization of Work Registration

- o Work registration is changed from a semiannual to an annual requirement.

Sec. 1311 Work Requirements

- o The disqualification penalty for voluntarily quitting a job is applied to participants as well as applicants.
- o The maximum age of a child who can exempt his parent from work registration is lowered from under 12 to under six.
- o Lack of adequate child care for a child aged six through 11 constitutes good cause for refusing a job.

- o Failure to comply with the requirements of another program which exempts a person from food stamp work requirements will subject that person to the food stamp work sanctions.

Sec. 1312 State Issuance Liability

- o USDA is authorized to establish fiscal tolerances for State mail issuance losses.

Sec. 1313 Access of Comptroller General to Information

- o The General Accounting Office is authorized to review confidential information from applicant retailers in the course of auditing other programs.

Sec. 1314 Reporting of Abuses by the Public

- o Authorized retailers must display a sign which informs the public how to report program abuse.

Sec. 1315 Retail Redemptions

- o Savings and loan associations are authorized to redeem food coupons.

Sec. 1316 Sixty-Day Transfer of Certification

- o This section deletes the requirement that State agencies guarantee relocating households 60 days of uninterrupted benefits.

Sec. 1317 Notice of Verification

- o Application forms must contain a boldface warning that information will be verified and that falsifying information may result in criminal prosecution.

Sec. 1318 Recertification Notice

- o State agencies are required to inform households that their certification period is expiring prior to the last month of the period, rather than immediately prior to or at the start of this month.

Sec. 1319 Disclosure of Information to Comptroller General, Law Enforcement Officials

- o The General Accounting Office is authorized to review confidential information from applicant households in the course of auditing another program.
- o All information from applicant households may be provided to law enforcement officials investigating alleged program violations.

Sec. 1320 Restoration of Lost Benefits

- o The period of time for which improperly denied benefits must be restored is limited to one year.

Sec. 1321 Information

- o Wage matching with unemployment compensation or Social Security data is mandated.
- o State agency contracts with issuance agents in areas where photo ID's are required must hold the agent liable for losses in which the photo ID information was not properly inspected and recorded.

Sec. 1322 Nutrition Education Program

- o USDA may use the techniques of the expanded food and nutrition education program (EFNEP) and other programs for nutrition education activities, rather than be restricted to only using the EFNEP.

Sec. 1323 Alaskan Fee Agents

- o USDA shall permit Alaska to use fee agents for various administrative activities in rural areas.

Sec. 1324 Minimum Mandatory Court Sentence for Criminal Offenses; Work Restitution Program

- o Imprisonment not to exceed 1 year is required for second and subsequent criminal convictions under the Food Stamp Act.
- o Courts may assign work to provide restitution to the government for its losses in lieu of incarceration.
- o Courts may lengthen administrative disqualification penalties by 18 months.

Sec. 1325 Staffing

- o This provision deletes the USDA requirement to establish State staffing standards.

Sec. 1326 Incentives for Error Reduction Efforts and Corrective Action Plans

- o States must meet Federal standards for improper denials and terminations (as well as achieve a 25 percent reduction in their error rate) to qualify for enhanced administrative cost-sharing at the 55 percent level.
- o States receiving enhanced administrative cost-sharing at the 55 and 60 percent levels must develop corrective action plans to reduce errors. Formerly, only States which did not qualify for enhanced funding were required to submit these plans.

Sec. 1327 Social Security Account Numbers

- o All household members must supply social security numbers as a condition of program eligibility.

Sec. 1328 Extending and Amending Cash-Out Pilot Projects

- o Authority to operate current cash-out projects for the elderly and disabled is extended until October 1, 1985.
- o USDA is authorized to conduct cash-out demonstration projects for pure AFDC households as well as the elderly and disabled.

Sec. 1329 Nutritional Monitoring

- o USDA is to implement pilot projects to evaluate different means of measuring the nutritional status of low-income people over time.

Sec. 1330 Pilot Projects to Simplify the Processing of Applications for Certain AFDC, SSI, and Medicaid Households

- o Authorizes USDA to conduct pilot projects to evaluate simplified eligibility and benefit determination for households which also receive AFDC, Medicaid, or SSI.

Sec. 1333 Food Stamp Funding and Program Extension

- o The Food Stamp Program is reauthorized for \$11.3 billion for Fiscal Year 1982.

Sec. 1332 Incentives, Sanctions, and Claims

- o Collected claims are credited to the appropriation account for the fiscal year in which collection occurs.
- o Enhanced administrative cost-sharing is paid from the appropriation account for the fiscal year in which funds are provided.

Sec. 1333 Workfare

- o States or political subdivisions may establish workfare programs in which food stamp recipients work in exchange for their allotments.

3. Food Stamp Act Amendments of 1982 (P.L. 97-253; enacted September 8, 1982)

A. Measures to Control Program Costs

Sec. 142 Household Definition

- o Nonelderly, nondisabled siblings who live together must file as one household.
- o Elderly people, living and sharing food with others, whose infirmity precludes their separate purchase and preparation of food may, along with their spouses, qualify as separate households, as long as the other people's income does not exceed 165 percent of the poverty line.

Sec. 143 Rounding Down

- o Household benefits and adjustments to the maximum allotments, standard deduction, and the dependent care/excess shelter cap are rounded to the lower dollar.
- o The unrounded cost of the 4-person Thrifty Food Plan is used to calculate the plan for other household sizes.

Sec. 144 Thrifty Food Plan Adjustments

- o The Thrifty Food Plan will be reduced by one percent when it is adjusted on October 1, 1982; October 1, 1983; and October 1, 1984.

Sec. 146 Income Standards of Eligibility

- o Households without an elderly or disabled member must meet a net income test at 100 percent of the poverty line as well as a gross income test at 130 percent of the poverty line.

Sec. 148 Adjustment of Deductions

- o The updates of the standard deduction and dependent care/excess shelter cap, scheduled for July 1, 1983, are delayed until October 1, 1983.

Sec. 149 Standard Utility Allowances

- o States are allowed to use standard allowances for utility costs. Formerly, regulations required these allowances.
- o Only households incurring heating or cooling expenses may receive a standard allowance for these costs.
- o Standard utility allowances must be prorated among households who live together and share expenses.

Sec. 157 Job Search

- o States may require applicants to search for a job before they are certified.

Sec. 161 College Students

- o The exemption to college student ineligibility based on being the head of a household with dependents is narrowed to include only parents caring for children under age six (or under 12 if child care is not available).
- o College students who receive AFDC may receive food stamps.

Sec. 163 Initial Allotments

- o Initial prorated allotments under \$10 are eliminated.

- o The first allotment in a recertification period will be prorated if there is any break in participation.

Sec. 164 Noncompliance in Other Programs

- o Food stamp benefits are not to be increased if other program benefits are reduced for intentional noncompliance.

Sec. 170 Expedited Coupon Issuance

- o A five day processing standard is established for expedited service cases.
- o Expedited service is limited to households with less than \$150 gross income (or who are destitute migrant or seasonal farmworkers) and with not more than \$100 in liquid assets.

Sec. 180 Error Rate Reduction System

- o National error rate standards are established at 9 percent for Fiscal Year 1983, 7 percent for Fiscal Year 1984, and 5 percent for Fiscal Year 1985. Underissuances are excluded from the error rate. States can avoid liability by reducing error rates one-third of the distance to the 5 percent target in Fiscal Year 1983 and two-thirds in Fiscal Year 1984.
- o Enhanced administrative cost-sharing is limited to the 60 percent level for States with error rates under 5 percent (including underissuances) and an acceptable rate of improper denials.
- o States which fail to meet their targets will have their Federal administrative cost-matching proportion reduced. The extent of the reduction depends on the amount by which the State misses its target.

8. Measures to Strengthen Program Administration

Sec. 145 Disabled Veterans and Survivors

- o Disabled veterans or their disabled surviving spouses and/or children are considered disabled for food stamp purposes.

Sec. 147 Coordination of Cost-of-Living Adjustments

- o Income attributable to COLA's in certain other programs (SSI, Railroad Retirement, and veteran's pensions) made on or after July 1 of any fiscal year will be excluded from food stamp income through the end of the fiscal year.

Sec. 150 Migrant Farmworkers

- o Migrant farmworkers may not be waived into retrospective budgeting.

Sec. 151 Financial Resources

- o Resource regulations (except those regarding vehicles) are frozen as of June 1, 1982.
- o Accessible retirement accounts are deemed resources.

Sec. 152 Studies

- o The statutory authority for completed studies is repealed.

Sec. 153 Categorical Eligibility

- o States may waive the resource eligibility standard for pure AFDC households.

Sec. 154 Monthly Reporting

- o The monthly reporting exemption for households in which all members are elderly or disabled and have no earned income is broadened by specifying that only the adult members need be elderly or disabled.
- o USDA is authorized to approve State waiver requests to allow certain households to report less frequently if the State demonstrates that monthly reporting would not be cost-effective for these households.

Sec. 155 Periodic Report Forms

- o This provision deletes the requirement that USDA approve State incident report forms.

Sec. 156 Reporting Requirements

- o USDA is authorized to waive the monthly reporting provisions of the Food Stamp Act in order to enable a State to coordinate its food stamp and AFDC monthly reporting requirements.

Sec. 158 Voluntarily Quitting a Job

- o The voluntary quit sanction is lengthened from a 60-day to a 90-day household disqualification.
- o Public employees who are dismissed from their positions because of participation in a strike are deemed to have voluntarily quit.

Sec. 159 Parents and Caretakers of Children

- o This provision deletes the work registration exemption granted to a parent/caretaker of children when another parent/caretaker in the household is registered for work.

Sec. 160 Joint Employment Regulations

- o This provision deletes the requirement for joint USDA/Department of Labor publication of work registration regulations.

Sec. 162 Alternative Issuance System

- o USDA may require States to employ alternative issuance systems to improve program integrity.
- o The costs of an alternative system may not be imposed on retailers.

Sec. 165 House-to-House Trade Routes

- o USDA may limit the authorizations of house-to-house trade routes to improve program integrity.

Sec. 166 Approval of State Plan

- o This provision removes USDA's authority to review and approve State forms, instructions, and other materials.

Sec. 167 Points and Hours of Certification and Issuance

- o This provision removes USDA's authority to establish minimum standards for the location and hours of operation of certification offices and issuance outlets.

Sec. 168 Authorized Representatives

- o This provision removes the right of any household to use an authorized representative.
- o USDA is authorized to establish criteria and special verification standards for authorized representatives, including a limit on the number of households a representative can serve.

Sec. 169 Disclosure of Information

- o Information from applicants may be shared with other Federal assistance programs and Federally-assisted State programs.

Sec. 171 Prompt Reduction or Termination of Benefits

- o State agencies may immediately reduce or terminate benefits (without normal notice of adverse action requirements) based on clear written information from households.

Sec. 172 Duplication of Coupons in More than One Jurisdiction Within a State

- o States must periodically verify that no individual receives benefits in more than one jurisdiction.

Sec. 173 Certification System

- o Two of the four previous joint processing requirements are made optional to States: joint food stamp/public (or general) assistance application forms and using public (or general) assistance casefile information as much as possible for food stamp certifications.

Sec. 174 Cashed-Out Programs

- o States must verify at least annually that SSI recipients in SSI cash-out States and participants in cash-out demonstration projects do not also receive coupons.

Sec. 175 Amount of Penalty and Length of Penalty

- o Disqualification penalties for violations by retailers or wholesalers are set at 6 months to 5 years for the first offense, 1 to 10 years for the second offense, and permanently for the third offense or for trafficking in coupons or ATP's.
- o The maximum amount of a civil money penalty is raised from \$5,000 to \$10,000.

Sec. 176 Bonds

- o USDA may require retailers or wholesalers that have been disqualified or fined to post bonds against the value of future violations.

Sec. 177 Alternative Means of Collection of Overissuances

- o States are authorized to use collection methods other than cash repayment or allotment reduction to recover claims against households (except those based on State agency error).

Sec. 178 Claims Collection Procedures

- o States must reduce the allotment to a household of a disqualified member if the household has not elected to pay its claim in cash within 30 days of the State's notifying the household of the claim.

Sec. 179 Cost Sharing for Collection of Overissuances

- o The prohibition against States retaining a portion of recoveries of overissuances caused by State agency error is reiterated.

Sec. 181 Employment Requirement Pilot Project

- o USDA is authorized to conduct demonstration projects in which unemployed able-bodied persons would become ineligible for benefits unless they participated in workfare or met other exemption criteria.

Sec. 182 Benefit Impact Study

- o USDA is required to evaluate the effects of food stamp benefit reductions caused by 1981 and 1982 legislation and the impact of monthly reporting and retrospective budgeting.
- o An interim report to Congress is due by February 1, 1984, and a final report by March 1, 1985.

Sec. 183 Authorization for Appropriations

- o The program is reauthorized through Fiscal Year 1985.
- o Funding caps are set at \$12.874 billion for Fiscal Year 1983, \$13.145 billion for Fiscal Year 1984 and \$13.933 billion for Fiscal Year 1985.

Sec. 184 Puerto Rico Block Grant

- o The Puerto Rico Nutrition Assistance Program must switch to noncash benefits by October 1, 1983.
- o USDA must evaluate the nutritional and economic impact of cash benefits under the Nutrition Assistance Program. A report to Congress is due by March 8, 1983.

Sec. 185 Similar Workfare Programs

- o USDA workfare regulations must permit State and local agencies to operate food stamp workfare as consistently as possible with other workfare programs.

Sec. 186 WIN Participants

- o The workfare exemption for WIN registrants participating at least 20 hours a week becomes optional to the State.

Sec. 187 Hours of Workfare

- o The maximum weekly number of workfare hours per participant is raised from 20 to 30.

Sec. 188 Reimbursement for Workfare Administrative Expenses

- o Workfare operators are to receive enhanced Federal administrative funding based on program savings achieved through job placements. Operating agencies may receive up to 150 percent of the savings resulting from increased earnings in the first month of employment after workfare.

APPENDIX B

ANALYSIS OF DATA FROM THE FOOD STAMP QUALITY CONTROL SAMPLES

Under the Food Stamp Quality Control (QC) program, a series of samples are drawn from the case records of the Food Stamp Program at various intervals, in order to verify benefit computations and compute error rates. Subsets of these samples, which typically consist of about 7000 case records, are also compiled for purposes of analysis. These subsamples constitute a series of nationally representative cross-sectional microdata files containing fairly complete information on the benefits, incomes, and demographic characteristics of selected food stamp recipient households. These files, therefore, may be used to analyze changes in the food stamp recipient population over time, as well as to examine the relationships between recipients' benefit levels and their incomes and demographic characteristics at particular points in time.

Two major aims in analyzing the data from the QC files were, first, identifying the impact of changes in the income and demographic characteristics of recipients on benefit levels in general, and second, estimating the specific impacts on benefits of changes in the Food Stamp Program enacted in 1981. The relationships between benefit levels and recipient characteristics have some inherent interest for those concerned with issues such as who is served by the Food Stamp Program and how well benefits are targetted to particular population and income groups. In addition, however, estimates of the marginal impacts of these variables on benefit levels, all else held constant, may be used in projecting expected changes in benefit levels when recipient incomes and other characteristics change. For

example, estimates of this type can be used to predict the impact on food stamp expenditures of certain projected changes in the demographic structure of the caseload, such as increases in the numbers of children receiving benefits.

The second, more specific set of issues investigated using the QC data have been the impacts of changes enacted under the Omnibus Budget Reconciliation Act of 1981 on the characteristics of the food stamp recipient population and on food stamp benefit levels. In exploring the impacts of OBRA, a particular effort was made to separate out its direct effects on benefit levels from indirect effects caused by changes in the population receiving food stamps.

In addition to direct changes in the Food Stamp Program under OBRA, two major factors operating in the 1981-1982 period had some effect on the composition and incomes of the food stamp recipient population: changes in eligibility and benefit determination rules for cash transfer programs such as Aid to Families with Dependent Children (AFDC), and changes in earnings and employment opportunities resulting from the fact that the economy as a whole was in a state of recession. It is very difficult to determine the relative impacts of each of these factors, or even to know whether they tended to reinforce each other or to cancel each other out. Within the context of the QC analysis in particular such determinations are especially difficult, because the QC sample contains information only on the population actually receiving food stamp benefits at a given point in time, and not on persons potentially eligible for benefits or on the low income population in general. For this reason, the analysis of the OBRA changes using the QC files has concentrated on the examination of the overall changes in benefit levels, including changes caused by changes in caseload composition. For the most

part, however, analysis of the underlying causes of the caseload changes found has been left for other parts of the study, where more directly relevant data are available.

Creation of an Analysis File

Because a major focus of this analysis was the impact of OBRA, and because the most recent QC samples provide data that are more directly comparable across time than are data from earlier samples, the analysis concentrated on data from the August 1981, February 1982, and August 1982 QC files. Although Quality Control surveys were also conducted in 1983, the 1983 data were not yet available at the time when these analyses were performed. Preliminary summary statistics from February 1983 are reported in Chapters III, IV and VI.

In order to examine caseload composition issues using these QC data, it was necessary first to merge data from the different surveys into a single analysis file, and to verify the statistics produced using that file against caseload and benefit statistics published by FNS. The analysis file that was created consists of data from the August 1981, February 1982, and August 1982 QC files and includes primarily variables describing the incomes, benefits and demographic characteristics of food stamp recipient households. After the file was constructed, sets of simple bivariate cross-tabulations were performed and checked against the tabulations of relevant variables published by FNS, in order to validate the output. As a result of this verification process, it was found that although the results were in general close to those published by FNS, in some cases slightly different definitions for particular variables had been used, resulting in small discrepancies between these totals for certain variables and those found by FNS. For the most part, these differences were the result of differences in the way missing data were

treated in compiling totals for certain variables. It was found that the totals arrived at by FNS could be duplicated by going back to the analysis file and recomputing the variables using FNS' definitions, which typically were somewhat broader. For the analytic purposes of this project however, it was believed that narrower definitions that excluded a larger proportion of cases with missing information were somewhat more useful. As a result, therefore, totals on the analysis file for particular subgroups within the population do not always match those in published FNS data sources. Table B.1 shows the comparative totals for several key variables.

Changes in Recipient Incomes and Food Stamp Benefits Over Time

The first major focus of the analysis of the QC data was an examination of changes in recipient incomes and food stamp benefits over time. The observed changes in mean incomes and benefits can be divided into two categories: those caused by changes in the mix of characteristics within the recipient population, and those caused by changes in mean incomes and benefits within categories of recipients. Tables B.2 through B.4 address these two issues. Table B.2 shows the sample means and standard errors for gross income, net income, and benefits in each of the three samples, and also shows the percentage of the recipient population in each of three key demographic groups: the elderly, earners, and households with children. Table B.3 provides additional details on the distribution of income and benefits, and Table B.4 shows the distribution of benefits, mean benefits, and mean incomes within each of the three demographic groups.

As Table B.2 illustrates, there were some significant increases in both mean gross and mean net income between February 1982 and August 1982, although the August 1981 to February 1982 changes in the means of these variables were not significant. In addition, the increase in mean benefits seen in February

Table B.1

COMPARISON OF SELECTED VARIABLES FOR AUGUST 1981
AND AUGUST 1982, AS SPECIFIED IN THE FNS QC REPORTS
AND ON THE URBAN INSTITUTE'S QC ANALYSIS FILE

	<u>August 1981</u>				<u>August 1982</u>			
	<u>Number of Cases^{a/}</u> QC Report	<u>Analysis</u> File	<u>Percent of Caseload</u> QC Report	<u>Analysis</u> File	<u>Number of Cases^{a/}</u> QC File	<u>Analysis</u> File	<u>Percent of Caseload</u> QC File	<u>Analysis</u> File
Total Caseload	7698	7698	100	100	7487	7208 ^{b/}	100	100
Households with Elderly Members	1611	1611	20.9	20.9	1469	1433	19.6	19.9
Households with Earners	1513	1413	19.7	18.4	1316	1217	17.6	16.9
Households Re- ceiving AFDC	3055	3087	39.7	40.1	3110	3068	41.5	42.6

NOTES: a. In thousands.

b. Excludes cases with benefits equal to or less than zero or without reported benefits amounts. If all cases included, total equals 7487.

Table B.2

ESTIMATED SAMPLE MEANS FOR SELECTED VARIABLES IN THE AUGUST 1981,
FEBRUARY 1982, AND AUGUST 1982 QC SAMPLES

Variable:	August 1981	February 1982	August 1982
<u>Mean Values, in dollars:</u>			
Gross Income	348.88 (3.30)	344.77 (3.20)	358.18 (3.26)
Net Income	195.77 (2.86)	196.59 (2.91)	217.09 (2.94)
Benefits	103.06 (1.00)	108.71 (1.08)	102.65 (1.07)
<u>Percentage of Households with:</u>			
Elderly Members	20.9 (0.55)	18.6 (0.58)	19.9 (0.55)
Earners	18.4 (0.56)	17.1 (0.57)	16.9 (0.57)
Children	56.4 (0.66)	58.6 (0.71)	58.0 (0.68)

NOTE: Values in parentheses are the standard errors of the sample means or proportions, as relevant.

Table B.3

QUARTILE POINTS AND MEANS FOR GROSS INCOME, NET INCOME AND
BENEFITS IN AUGUST 1981, FEBRUARY 1982, AND AUGUST 1982

	Quartile 1	Quartile 2	Quartile 3	Quartile 4	Mean
<u>August 1981</u>					
Gross Income	0-218	218-305	305-447	447-1567	349
Net Income	0-42	42-162	162-294	294-1253	196
Benefit Amount	0-49	49-91	91-148	148-609	103
<u>February 1982</u>					
Gross Income	0-220	220-312	312-444	444-2460	345
Net Income	0-34	34-162	162-293	293-2375	197
Benefit Amount	0-55	55-97	97-153	153-533	109
<u>August 1982</u>					
Gross Income	0-218	218-321	321-465	465-1944	358
Net Income	0-47	47-181	181-322	322-1509	217
Benefit Amount	0-45	45-88	88-146	146-630	103

Table B.4

MONTHLY BENEFITS BY QUARTILE, AUGUST 1981, FEBRUARY 1982, AUGUST 1982:
HOUSEHOLDS WITH SELECTED CHARACTERISTICS

	<u>Households with Elderly</u>			<u>Households with Children</u>			<u>Households with Earners</u>		
	Aug. 81	Feb. 82	Aug. 82	Aug. 81	Feb. 82	Aug. 82	Aug. 81	Feb. 82	Aug. 82
<u>Percent with Benefits in Each Quartile</u>									
1st Quartile	67.0	66.1	77.4	5.5	5.8	5.6	18.3	17.4	13.3
2nd Quartile	23.5	23.7	13.9	18.1	17.0	16.7	26.5	25.4	28.2
3rd Quartile	5.4	6.1	6.4	37.1	39.0	37.9	28.2	26.6	28.2
4th Quartile	4.1	4.1	2.3	39.3	38.2	39.8	27.0	30.6	29.9
Mean FS Benefit	46	45	38	141	147	140	114	126	120
Mean Net Income	183	201	233	239	230	254	335	312	336
Mean Gross Income	329	342	361	407	390	409	562	527	550

1982 does appear to be significant, although mean benefit levels do not seem to be significantly different in the other two samples.¹

The patterns seen in Table B.2 are not characteristic only of the means, but rather are repeated with a few interesting variations throughout the benefit distributions, as Table B.3 indicates. For example, although gross incomes rose slightly in the lower income categories between August 1981 and February 1982, a much larger increase occurred, especially in the upper quartiles, between February and August 1982. Net incomes were also fairly stable in most categories over the first two samples, although for the lowest quartile they actually fell between August 1981 and February 1982. Since the benefit formula is based on net incomes, the relatively low net incomes seen in February resulted in relatively high benefit levels, particularly in the lower quartiles. Similarly, the growth in net incomes seen between February and August 1982 resulted in a decline in benefit levels. Median benefits were \$3 lower in August 1982 than they had been in August 1981, and \$9 lower than they had been in February. As seen earlier, the change in average benefits was less--under 50 cents between the two August samples--but the mean in August 1982 was as high as it was only because of the presence of some households with unusually high benefits in that sample. The quartile points defining all three of the lowest benefit quartiles were lower in August 1982 than in either of the earlier periods.

Overall, however, differences between the means and especially, the differences between the estimated sample proportions for different demographic groups within these samples are relatively small, compared to the estimated

1. For details on the calculation of standard errors and measures of statistical significance for these samples, see the Analysis Report of November 20, 1984 entitled "The Computation of Standard Errors for the Food Stamp Quality Control Samples."

standard errors. For these groups, only the proportion of earners, among all those examined, is significantly different (at the 95 percent confidence level) in the August 1982 sample and in either of the other two.

Impacts of Recipient Characteristics on Incomes and Benefits

To some extent, the distributional patterns seen for benefits and incomes for the samples as a whole are repeated when mean incomes and benefits within population subgroups are considered, although with some interesting differences, as Table B.4 shows. For example, both gross and net incomes rise across time for households with elderly members, on average, but for both earners and households with children mean gross and net incomes were lower in the February sample than in either of the August ones. This finding is particularly striking for earners, and is significant at the 99 percent level. The patterns seen for incomes are for the most part mirrored in the benefit distributions, which in general are the inverse of the income distribution patterns. The tendency of benefit levels in the February sample to be high relative to incomes is also reflected in the patterns within groups. For example, although both gross and net incomes for the elderly were higher in the February sample, on average, than in the August 1981 sample, benefits were essentially the same.

To some extent, the variations in mean gross and net incomes seen for the various demographic groups shown in Table B.4 are artifacts of differences in the distribution of benefits received from the transfer programs other than food stamps for which these groups are eligible. As Table B.5 shows, for example, the incomes of those receiving benefits from the major transfer programs serving the elderly--Social Security and Supplemental Security Income (SSI)--rose steadily, on mean, over the period. AFDC recipients, on the other hand, experienced a small dip in their gross incomes between August 1981 and

Table B.5

BENEFITS BY QUARTILE, AUGUST 1981, FEBRUARY 1982, AUGUST 1982:
HOUSEHOLDS RECEIVING BENEFITS FROM SELECTED PROGRAMS

	SSI Recipient Households			Social Security			AFDC		
	Aug. 81	Feb. 82	Aug. 82	Aug. 81	Feb. 82	Aug. 82	Aug. 81	Feb. 82	Aug. 82
<u>Percent with Benefits in Each Quartile</u>									
1st Quartile	59.8	66.9	69.7	58.3	61.7	61.3	6.1	5.2	5.1
2nd Quartile	24.4	17.3	16.3	20.4	16.1	17.4	20.9	18.9	26.5
3rd Quartile	9.5	8.7	7.9	10.9	11.4	12.3	38.3	42.0	39.8
4th Quartile	6.3	7.0	6.0	10.4	10.8	8.6	35.5	31.9	36.2
Mean FS Benefit	56	54	45	62	64	56	135	138	135
Mean Net Income	195	226	243	229	251	281	229	244	235
Mean Gross Income	345	364	376	376	393	410	388	384	392

February 1982, while their net incomes remained exactly the same, on mean, across the two samples. Clearly, these patterns are highly correlated with the patterns seen within the corresponding demographic groups.

Table B.6 seems to indicate, however, that the patterns of income receipt in Tables B.4 and B.5 are not solely a reflection of changes in benefit levels in the cash benefit programs; mean AFDC benefits, for example, are not significantly different across the three samples, and do not dip in February as do mean incomes of AFDC recipients. Mean earnings, on the other hand, do decline significantly in the February sample. Since between 8 and 13 percent of the AFDC recipient households in the QC samples have earnings as well, this dip in earnings may help to account for the slight decline in the mean incomes of AFDC recipients seen in Table B.5, as well as the fall in the incomes of earners seen in Table B.4. In all likelihood, this decline in earnings resulted primarily from the effects of the recession, rather than from the changes in the treatment of AFDC recipients with earnings that were enacted as part of OBRA. Although OBRA changes would have gone into effect by February 1982, the reductions in benefits for earners took place only after a 4 month waiting period, which probably would not yet have been over for most recipients. In addition, data from the AFDC QC surveys indicate that the initial impact of the OBRA changes on AFDC recipients with earnings was to reduce their benefit levels, rather than their earnings. (In other words, if there was any impact on work incentives for AFDC recipients under the OBRA amendments, it does not appear to have taken effect immediately.)

For those receiving Social Security and SSI, mean benefit amounts rose slightly between August 1981 and February 1982, and there were significant increases between February and August 1982. These increases are presumably a major contributing factor in explaining the relatively large increases in the

AVERAGE MONTHLY INCOME RECEIVED FROM VARIOUS SOURCES,
FOR THOSE WITH SOME INCOME FROM SOURCE--
AUGUST 1981, FEBRUARY 1982, AND AUGUST 1982

<u>Average Income From:</u>	<u>Sample</u>		
	<u>August 1981</u>	<u>February 1982</u>	<u>August 1982</u>
Earnings	452	422	450
AFDC	284	289	292
Social Security ^a	290	292	313
SSI	181	185	198
<u>Percentage with Income from Source</u>			
Earnings	18.4	17.1	16.9
AFDC	40.1	44.5	42.6
Social Security ^a	23.1	22.7	24.0
SSI	18.7	17.0	18.0

a. Includes Civil Service Retirement, Railroad Retirement, and other pension income.

gross incomes of the elderly between February and August 1982 shown in Table B.4.

The patterns of impacts of changes in recipient characteristics suggested by tables B.2 through B.6 are for the most part confirmed by the results of the regression analysis performed on the QC data. Before turning to a discussion of these results, however, it is necessary first to describe briefly the model used in determining the impact of recipient characteristics on food stamp benefit levels.

Specification of Regression Analyses

Regression equations were specified in two different ways for the analysis of the impacts of recipient characteristics on benefit levels--using primarily demographic variables, such as numbers of children in the household, presence of elderly household members, and so forth, and using variables relating to the economic characteristics of households, such as AFDC reciprocity, Social Security reciprocity, and other variables of this type. Obviously, there will tend to be strong correlations between these economic and demographic variables, since the demographic factors are in most cases the determinants of eligibility for the cash benefit programs in question. For example, in this population, presence of children in the household and receipt of AFDC benefits are almost entirely coincident factors and one clearly would not wish to include both variables in any given regression equation. There is no a priori reason to assume, however, that one form of this variable pair will be more significant in explaining benefit levels than the other. Both versions of the model, therefore, were examined, and were found to produce very similar results. (Only the second version is discussed in detail here, in order to avoid unnecessary repetition.)

In examining the impacts of receipt of benefits from other programs and other sources of income on food stamp benefits, the focus has been on issues of reciprocity rather than on the amounts received. For all regressions, the dependent variable examined was the level of food stamp benefits. This level is largely determined by income since food stamp benefits are reduced by about 30 cents for each additional dollar of household income. Further, most recipients receive all or almost all of their income from a single source. Regressing income amounts against benefits, therefore, will simply result in a regression coefficient of approximately .3, which is the benefit-reduction rate for food stamps. (The only income type for which this does not hold is earnings, which, because the earnings deduction is specified in percentage terms and is automatically given to all earners, bears a slightly more complex relationship to benefit levels.) Specifying the equations so as to include only flags indicating benefit reciprocity rather than amounts received, therefore, provided somewhat more interesting information--namely, the impact of a marginal change in the proportion of the sample receiving benefits from other programs on food stamp benefit levels. The equations were also then used to answer other questions such as what proportion of the change in benefit levels between August 1981 and February 1982 was attributable to the change in the number of AFDC recipients.

Independent variables included in the pooled regression equations discussed here, therefore, were HHSIZE (household size); ELDFLG (variable indicating the presence of elderly persons in the household); EARNER (variable indicating the presence of at least one earner in the household); AFDCFLG (variable indicating AFDC reciprocity); SOCSECFLG (variable indicating Social Security reciprocity); SSIFLG (variable indicating SSI reciprocity); PRESKIDS (variable indicating the presence of pre-school aged children in the

household); FHEAD (variable indicating the presence of a female household head); and two dummy variables indicating sample date. The dependent variable for all the regression specifications tried was the reported household benefit level.

Regression Results

As Table B.7 shows, all the variables discussed above were significant predictors of household benefit levels, with the exception of the dummy variable for the February 1982 sample. The largest single effect was related to the presence of an earner in the household, which lowered average household benefits by about \$37 on average, all else held constant. Other large coefficients were related to Social Security reciprocity, which reduced average benefit levels by almost \$32, all else held constant, and household size--each additional household member appears to increase benefit levels by about \$32 on average, all else held constant. AFDC reciprocity and SSI reciprocity, like Social Security, had a negative impact on benefit levels, of about \$15 and \$24 respectively.

Interestingly, the impacts of variables such as ELDFLG and FHEAD were quite small (although still significant) relatively speaking, once benefit reciprocity was controlled for. (In the version of the model including only demographic variables, the coefficients for these variables were much larger, indicating that they were picking up some of the benefit reciprocity effects.)

The variable PRESKIDS was included on the hypothesis that, holding constant household size and benefit reciprocity status, the presence of younger children in the household was likely to result in lower gross incomes (largely because earnings opportunities were likely to be more limited) and thus higher benefits. As Table B.7 shows, the results tended to confirm this hypothesis.

Table B.7

IMPACTS OF RECIPIENT CHARACTERISTICS ON
HOUSEHOLD BENEFIT LEVELS: REGRESSION COEFFICIENTS
FOR THE POOLED AUGUST 1981, FEBRUARY 1982,
AND AUGUST 1982 QC SAMPLES

All Dates		
$R^2 = .69$		
HHSIZE	31.8	**
ELDFLG	-6.6	**
EARNER	-37.0	**
AFDCFLG	-14.6	**
SOCSECFLG	-31.7	**
SSIFLG	-23.6	**
PRESKIDS	10.0	**
FHEAD	4.1	**
FEB82	1.4	--
AUG82	-4.0	**

NOTE: ** Indicates variable is significant at a 99% confidence level.

The two final variables included in this regression were dummies for the later two sample dates. Their results were quite interesting--as Table B.7 indicates, the coefficient for the February 1982 dummy was positive but both small and insignificant, while the coefficient for August 1982 was negative, somewhat larger, and highly significant. Overall, this regression indicates that being in the February sample increased average benefits by slightly over a dollar, relative to the August 1981 sample, and that being in the August 1982 sample reduced benefits relative to August 1981 by about \$4, all else held constant. These estimates are consistent with calculations made earlier in this project, which were based on simple tabular data.

Summary of Results from the QC Analysis

In summary, recipient characteristics, and particularly those related to receipt of cash benefits and of earnings, do have a major impact on food stamp benefit levels, and variations in these characteristics across households accounts for a large proportion of the total variation in food stamp benefits. Household size, the presence of earners in the household, and, for the elderly, Social Security reciprocity, appear to be particularly important in explaining average benefit levels.

The structure of benefit determinations also appears to be very similar across the three samples examined--neither coefficients for particular variables nor their levels of statistical significance varied dramatically from year to year. Although changes in sample means and proportions for key variables such as the proportion of the sample with earnings or with various cash benefits are not typically very large across these three samples, they are statistically significant in a few cases--notably, for earners--and do contribute to variations in mean benefit levels across time. In fact, if all of these recipient characteristics are controlled for, the increase of

approximately \$6 that occurred in mean benefits between August 1981 and February 1982 is almost completely explained.

Between August 1981 and August 1982, there was almost no change in mean benefit levels in the Food Stamp Program. There were some significant changes in the characteristics of recipients, however--for example, a decline in the proportion of the sample with earnings or with AFDC benefits--that, all else held constant, should have caused mean benefits to rise slightly. Thus, if these changes in recipient characteristics are controlled for, there is a small but significant negative coefficient for the August 1982 dummy, which indicates that benefits for that sample were about \$4 lower than would have been expected based on the composition of the recipient population and the relationships obtaining in the earlier two samples. Some of this difference may be due to increases in the average level of earnings or cash benefits for those who received income from these sources over this period, but, except in the case of Social Security and SSI benefits, these changes were small and in all cases they were neutral or even negative in real terms.

It is probable, therefore, that at least part of this rather small decline in relative benefits was due to the impact of the OBRA changes on food stamp benefits. The lack of impact of these changes in the February sample seems to result largely from the failure of recipients' nominal incomes to rise over the August 1981 to February 1982 period. This flat income profile was a result both of the recession, which reduced mean earnings, and of the fact that COLAs in the cash benefit programs do not normally occur during this period.

In conclusion, then, changes in recipient characteristics across samples, which for the most part probably were not highly correlated with the OBRA changes in food stamps, were largely responsible for the changes in mean

benefit levels seen over this period. By August 1982, however, there does appear to have been a small decline in benefit levels, all else held constant, which was probably associated, at least in part, with the changes enacted under OBRA. This impact might have been somewhat larger, and might have occurred earlier, if recipients' incomes, and especially, earnings levels, had not been held down by the recession. As it was, however, the demonstrable impact of OBRA on the level of food stamp benefits in this period, while perceptible, appears to have been quite small.

Additional Estimates of the Impacts of the Legislation

In addition to the regressions done specifically for the analysis of the QC files, some additional calculations were made to arrive at the results reported in Chapters III and IV of this report. As discussed above, the regressions done for this analysis found a \$4 decline in benefits between August 1981 and August 1982 which was attributable, at least in part, to the OBRA legislation. Since there was no actual change in average benefits over this period, this implies that the caseload composition changes being controlled for in these regressions would have caused benefits to rise by \$4 in the absence of the OBRA changes. As it was, however, the \$4 decline due to OBRA and the \$4 increase due to caseload composition changes almost exactly offset each other.

The regression equations discussed above controlled only for characteristics of food stamp recipients, however, and not for changes in their gross incomes. For most groups, this made very little difference over the August 1981 to August 1982 period, since there were few significant changes in gross incomes. The only group for whom changes in income caused major changes in benefit levels over this period, in fact, were the elderly,

whose gross income rose from an average of \$329 to \$361 per household, resulting in a decline in their average benefits from \$46 to \$38.

Since it was believed that the August 1982 dummy might be picking up the effects of some of these income changes as well as of the legislative changes, and since the evidence was strong that the income changes were not related to OBRA, a simple calculation was performed to estimate the impacts of the changes in the income and average benefits of the elderly on average benefits for the population as a whole (holding constant compositional factors). Specifically, average benefits for August 1982 were recalculated, using the sample proportions for elderly and non-elderly households that actually obtained in 1982, but substituting in the average benefits that each group would have received based on their 1981 gross incomes. Since the benefit formula did not change over this period, this in effect meant using each group's average benefit in 1981, weighted by their sample proportion in 1982, to calculate average benefits for the population. This calculation gave an average for 1982 as it would have been with the 1982 caseload composition, but with average benefits for each group that reflected their 1981 rather than 1982 gross incomes.

Under this calculation, it was found that average benefits for the population as a whole would have been about \$1 higher in August 1982 if the gross incomes of the elderly had not risen over the August 1981 to August 1982 period. It was estimated, therefore, that about \$1 of the \$4 decline in benefits that was picked up by the August 1982 dummy in the regression equations was actually due to income changes rather than to OBRA. Adjusting for this \$1 income-related effect lowered the estimated impact of OBRA on average benefits to about \$3.

Finally, as discussed in Chapter III, all of these estimates represent changes in nominal benefit levels during the August 1981 to August 1982 period. Because prices were rising somewhat over this period, however, real benefits--that is, benefits adjusted for inflation--actually fell somewhat more than did nominal benefits. In order to estimate this decline in real benefits, the average nominal benefit level that would have been needed in August 1982 to maintain the same average real benefit as in August 1981 was calculated, and was found to be between \$106 and \$107. (Since food stamp benefits can only be used to purchase food, the Consumer Price Index for food, rather than for all consumer goods, was used in making this calculation.) This was compared to nominal benefits in August 1982, adjusted for caseload composition and income changes.

As seen above, if the caseload composition in August 1982 had been the same as it was a year earlier, but all else had been the same as in August 1982, average benefits would have been about \$4 lower than they actually were (in other words, demographic changes increased average benefits by about \$4.) Without these caseload changes, therefore, average benefits in 1982 would have been about \$99, or \$7 to \$8 below the amount needed to maintain real benefits at their 1981 levels. This calculation, however, does not take into account the increase in gross incomes for the elderly discussed above, which was estimated to reduce average benefits in August 1982 by about \$1. If this reduction due to income changes had not occurred, therefore, average benefits would have been about \$1 higher in August 1982, or about \$100 after adjusting for both caseload composition and income changes. This adjusted average benefit estimate is about \$6 to \$7 lower than the amount that would have been needed to maintain average benefits at the same real levels as in August 1981.

In considering these estimates of the changes in real benefits over the August 1981 to August 1982 period, it is important to bear in mind that these estimates solely reflect changes in the purchasing power of benefits over this period, holding constant income and compositional factors. They do not necessarily represent the benefit that food stamp recipients would have received in the absence of OBRA, since the cost of living adjustment that was foregone would have been based on a different reference period, in which price changes were somewhat greater than they were between August 1981 and August 1982.

In other words, these estimates imply that food stamp recipient households would have needed \$6 to \$8 more in benefits on average in August 1982, in order to be able to purchase the same market basket of goods as in August 1981. If cost of living adjustments had occurred under the pre-OBRA schedule, however, real benefits would actually have been higher in August 1982 than in August 1981, because the COLA would have been based on changes in food prices in 1980-1981, which were greater than those between August 1981 and August 1982. Thus, the estimate of the decline in the average purchasing power of benefits adjusted for caseload and income changes derived under the methodology discussed here is not equivalent to an estimate of the impact of the OBRA delay on benefits derived by comparing the August 1982 benefit with a synthetic 1982 benefit that might have occurred if OBRA had not been implemented.

APPENDIX C

ANALYSIS OF FOOD STAMP TIME SERIES DATA

(Net Flows Model)

Overview

This Appendix describes the data and methods employed in the analysis of State food stamp caseload flows. The net flow of cases is defined as the change in the number of cases from month to month and is a function of economic conditions, demographic characteristics of the population, and program parameters. The net flows model contrasts with the macro model estimated by DRI (see Appendix D) in that the macro model focuses on the stock of food stamp cases at a point in time, while the net flows model looks at the change in the caseload from month to month. The purpose behind the net flows model is to obtain estimates of the impact of the 1981 and 1982 OBRA legislation on the Food Stamp Program, holding constant economic and demographic factors. The DRI model has a similar purpose although its main function is to take into account interactions between the economy and the Food Stamp Program. However, the net flows model makes use of more disaggregated data and allows for the incorporation of more complex economic effects.

In particular, the net flows model is characterized by a dynamic perspective on the Food Stamp Program. The change in the caseload at any time is the net of case openings and case closings, and the model therefore includes explanatory variables related to the movement on and off the program. Additionally, the model employs variables which affect the pool of eligible participants in the current period as well as in previous periods to account for lagged effects. For example, the number of case openings may be a

consequence of current AFDC case openings, demographic factors, seasonal factors, and program rules. In addition, current and lagged economic conditions are expected to be important determinants. The Food Stamp caseload is known to be sensitive to the business cycle, and to employment characteristics in particular. High levels of current unemployment are expected to affect case openings with a lag as people exhaust unemployment insurance coverage and personal savings. Hence, it is important to control for contemporaneous as well as lagged economic conditions.

Of major interest in the analysis of the net flows model is the impact of various program policy changes, particularly changes under 1981 and 1982 OBRA legislation. States implemented the various policy changes at different times. Given enough variation in implementation dates, the marginal impact of a policy change on the net flow of cases, holding constant economic and demographic conditions, can be estimated with more confidence. Thus, while the effects of economic and demographic changes are of interest in their own right, primary interest is in estimating the effects of policy changes. Because the net flows model uses micro-data--observations on state-specific variables--the variation in circumstances from state to state is great enough to allow the effects of program changes to be isolated. In the next section the data are described in more detail.

Description of the Data Base

The core data used in this analysis are monthly reports by each state from July, 1969 through April, 1984 on the number of food stamp recipients from the publication "Food Stamp Program: Statistical Summary of Operations."¹ Hence, the data are pooled across states and time periods; for

1. Starting in July, 1982 the data are published only once per quarter, however, a complete set of monthly data was provided by FNS staff.

a given month there are 51 state observations (including the District of Columbia but excluding Puerto Rico).¹

Appended to the basic food stamp data are measures of economic conditions and demographic characteristics. Whenever possible monthly, state-specific variables were used, but, some variables of interest are available only quarterly or annually. For example, the distribution of state population by age is available only on an annual basis, as are certain economic variables, such as per capita personal income. The lack of monthly or quarterly demographic data is not a major problem as these variables change relatively slowly across time. A few variables of interest are not available by state; income distribution is available only for the four census regions and prices are collected for 28 large SMSA's.

Table C.1 summarizes the variables included in the data base grouped according to the major categories of geographic, demographic, economic, and program variables. Descriptive statistics for many of these variables are provided in Table C.2. These are based on data over the period from 1976 to 1983. Much of the preliminary analysis was done on data covering a longer period from 1970 to 1983. However, experiments with disaggregating by time suggested that the determinants of the net flows were significantly different in the later years of the program. The time frame from 1976-1983 was chosen for the final analysis because the program was well-established over that time. Prior to 1976 the program did not exist in all counties in the U.S. Some states initiated a program later than others or delayed moving toward coupon issuance rather than commodity distribution. In general, the early years of the program witnessed periods of rapid growth sometimes caused by

1. In the early years of the program not all states participated so there may not be 51 observations for every month. By 1974 all states had food stamp offices in operation.

Table C.1
VARIABLES USED IN THE NET FLOW ANALYSIS

<u>Variable</u>	<u>Symbol</u>
Geographic	
FNS Regions:	
New England	N. England
Mid Atlantic	M. Atlantic
Southeast	Southeast
Midwest	Midwest
Southwest	Southwest
Mountain Plains	Mt. Plains
Western	Western
Demographic	
Persons under 5 years of age (000,000's)	POPU5
Persons 5-17 years of age (000,000's)	POP5-17
Persons 18-44 years of age (000,000's)	POP18-44
Persons 45-64 years of age (000,000's)	POP45-64
Persons 65 years or older (000,000's)	POP65P
Average Household Size	HHSIZE
Food Stamp Program	
Quarterly average of the month-to-month change in the caseload of individuals	NET FLOW
Quarterly average of the monthly value of issuance per person	AVGBEN
Deflated average of the monthly value of issuance per person (\$ 1977)	AVGBENR
Number of State Food Stamp Offices	PROJECTS
Maximum monthly Food Stamp Benefit for a 4-person household (\$ 1977)	MAXFSBENR
Elimination of the Purchase Requirement	EPR
1981 OBRA Changes	OBRA81
1982 OBRA Changes	OBRA82

Table C.1 (continued)

<u>Variable</u>	<u>Symbol</u>
Other Programs	
AFDC Case Openings	AFDC OPEN
AFDC Case Closings	AFDC CLOSE
AFDC Maximum monthly Benefit for a 4-person family (\$ 1977)	MAX AFDCBENR
Average SSI monthly benefit for an aged couple (\$ 1977)	AVGSSIR
Average monthly benefit amount for retired workers, disabled workers, and widows (\$ 1977)	AVG SOCSECR
ECONOMIC	
Business Cycle Peak	BC PEAK
Business Cycle Trough	BC TROUGH
Quarter leading the Peak	PEAK LEAD
Quarter leading the Trough	TROUGH LEAD
Per capita Personal Income (000') (\$ 1977--State measured annually)	YPCAPR
Quarterly average of the monthly state unemployment rate	URATE
URATE lagged one quarter	URATE(-1)
Quarterly average of the monthly state insured unemployment rate	IURATE
Ratio of IURATE to URATE	IURATE/URATE
Interaction between URATE and BC PEAK	URATE*PEAK
Interaction between URATE and BC TROUGH	URATE*TROUGH

Table C.1 (continued)

<u>Variable</u>	<u>Symbol</u>
Variables Not in Final Specification	
% of Families with Real Income:	
Under \$2,000	
\$2,000 - \$5,000	
\$5,000 - \$10,000	
\$10,000 - \$20,000	
Over \$20,000	
Average weekly earnings of production workers in manufacturing	
% Distribution of Duration of Unemployment:	
27-51 weeks	
52 weeks or longer	

Table C.2

DESCRIPTIVE STATISTICS -- CONTINUOUS VARIABLES
1976-1983

<u>Variable</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Minimum</u>	<u>Maximum</u>
POPU5 (000,000's)	.324	.331	.032	2.008
POP5-17 (000,000's)	.942	.950	.093	4.809
POP18-44 (000,000's)	1.805	1.916	.149	11.299
POP45-64 (000,000's)	.882	.941	.076	4.710
POP65P (000,000's)	.503	.526	.034	2.615
HHSIZE	2.78	.06	2.72	2.89
PROJECTS	61.5	46.6	1.0	254.0
MAXFS	216.44	36.91	166.00	401.00
MAXFS R	176.07	8.95	163.12	258.54
NET FLOW	831	9545	-82811	101810
AVG BEN	33.35	9.79	16.80	238.96
AVG BENR	27.23	5.68	-	-
AFDC OPEN	9138	12359	15	86541
AFDC CLOSE	9180	13492	316	117479
MAX AFDC	327.16	114.84	60.00	625.00
MAX AFDCR	266.30	97.45	60.00	580.79
AVG SSI	136.77	50.12	34.48	564.83
AVG SSIR	109.11	39.91	24.96	590.83
AVGSOCSEC	321.83	67.13	218.40	410.23
AVGSOCSEC R	255.02	7.44	235.60	275.17
CPIALL	1.26	.25	.89	1.64
CPIFOOD	1.23	.21	.89	1.55
YPCAP (000's)	8.727	2.142	4.443	16.409
YPCAPR (000's)	6.927	0.969	4.762	10.320
IURATE	3.69	1.55	.50	10.90
URATE	7.17	2.37	2.23	20.50
URATE(-1)	7.16	2.37	2.23	20.50
UR*PEAK	.42	1.67	0.0	11.23
UR*TROUGH	.52	2.11	0.0	16.20

Descriptive Statistics -- Discrete Variables
1976-1983

<u>Variable</u>	<u>Mean</u>	<u>Sum</u>
N. England	.14	224
M. Atlantic	.14	224
Midwest	.12	192
Southwest	.10	160
Mt. Plains	.20	320
Western	.14	224
Southeast	.16	256
EPR	.63	1007
OBRA 81	.28	449
OBRA 82	.17	186
BC PEAK	.06	100
BC TROUGH	.06	100
PEAK LEAD	.06	100
TROUGH LEAD	.06	100

factors not relevant in more recent years. Confining the analysis to the 1976-1983 period should provide estimates more appropriate to current policy considerations.¹

Graphs depicting the net flows at the national and regional levels provide a historical picture of program change. Figure C.1 shows the quarterly average of the month-to-month change in food stamp caseloads nationally from mid-1969 to late-1983. The erratic nature of the series is visually underscored. For this reason quarterly averages of the monthly net flow were used in the final analysis--the model performed less than satisfactorily at predicting the monthly series but worked well using quarterly averages.²

The two major increases in the net flows are in the fourth quarter of 1974 and in the first quarter of 1979. The former is associated with the general economic slowdown, the latter with the elimination of the purchase requirement. In general, the net flows tend to be related to business conditions and the peaks and troughs of the business cycle are indicated on the graphs.

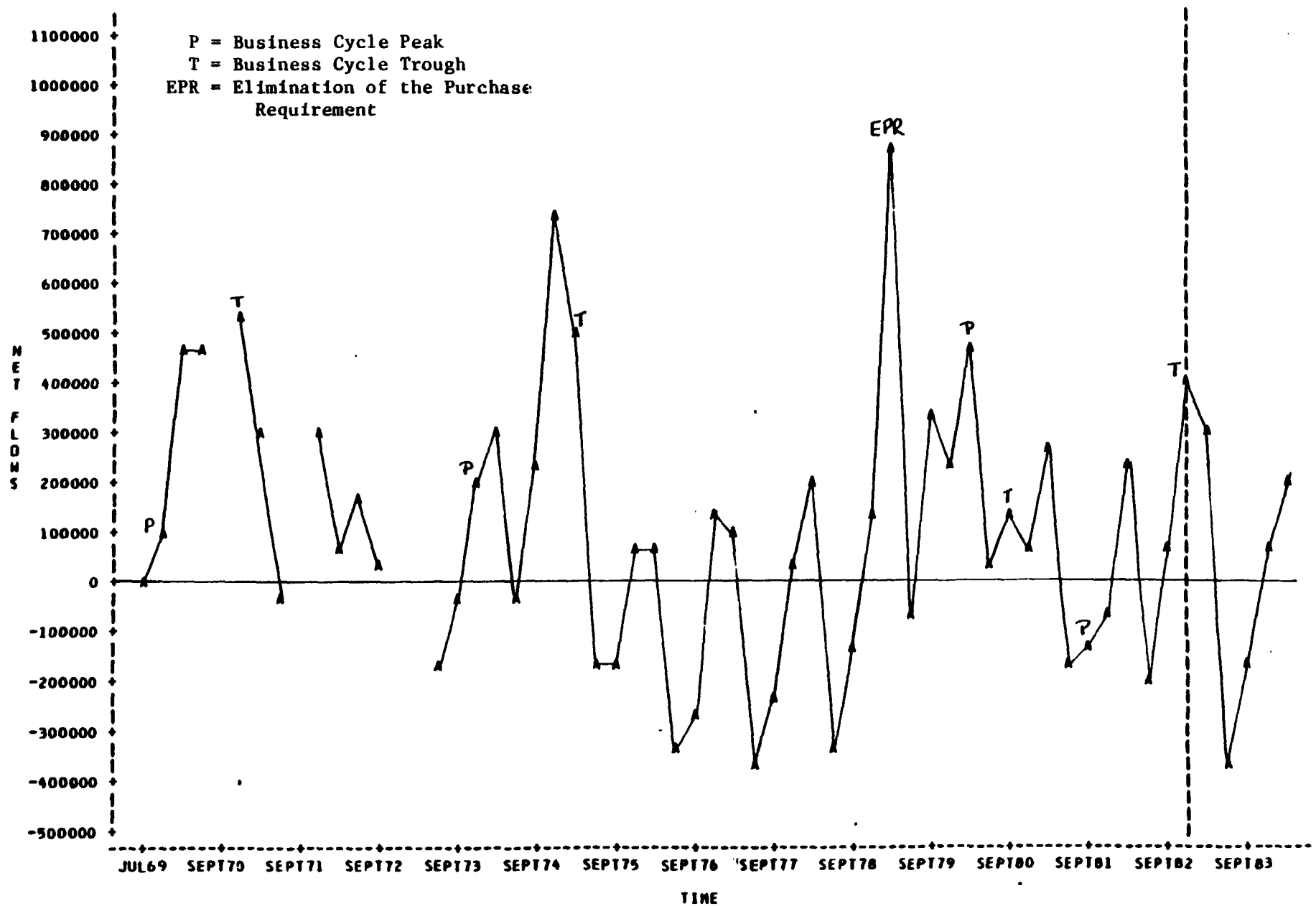
Figures C.2 through C.8 display the regional net flows. The national pattern is essentially repeated across the seven regions. Some minor variations from the norm can be seen but none of these lead to significant regional differences in the change in caseloads.

1. A point of interest is the difference in the average monthly net flow between the two periods. Between 1970 and 1983, the average stood at +1,983 cases but was only +831 cases between 1976 and 1983--a difference which is statistically significant.

2. The practice of "smoothing" a highly erratic series using some sort of averaging procedure is common in economic modeling.

Figure C.1

PLOT OF NATIONAL NET FLOWS BY TIME



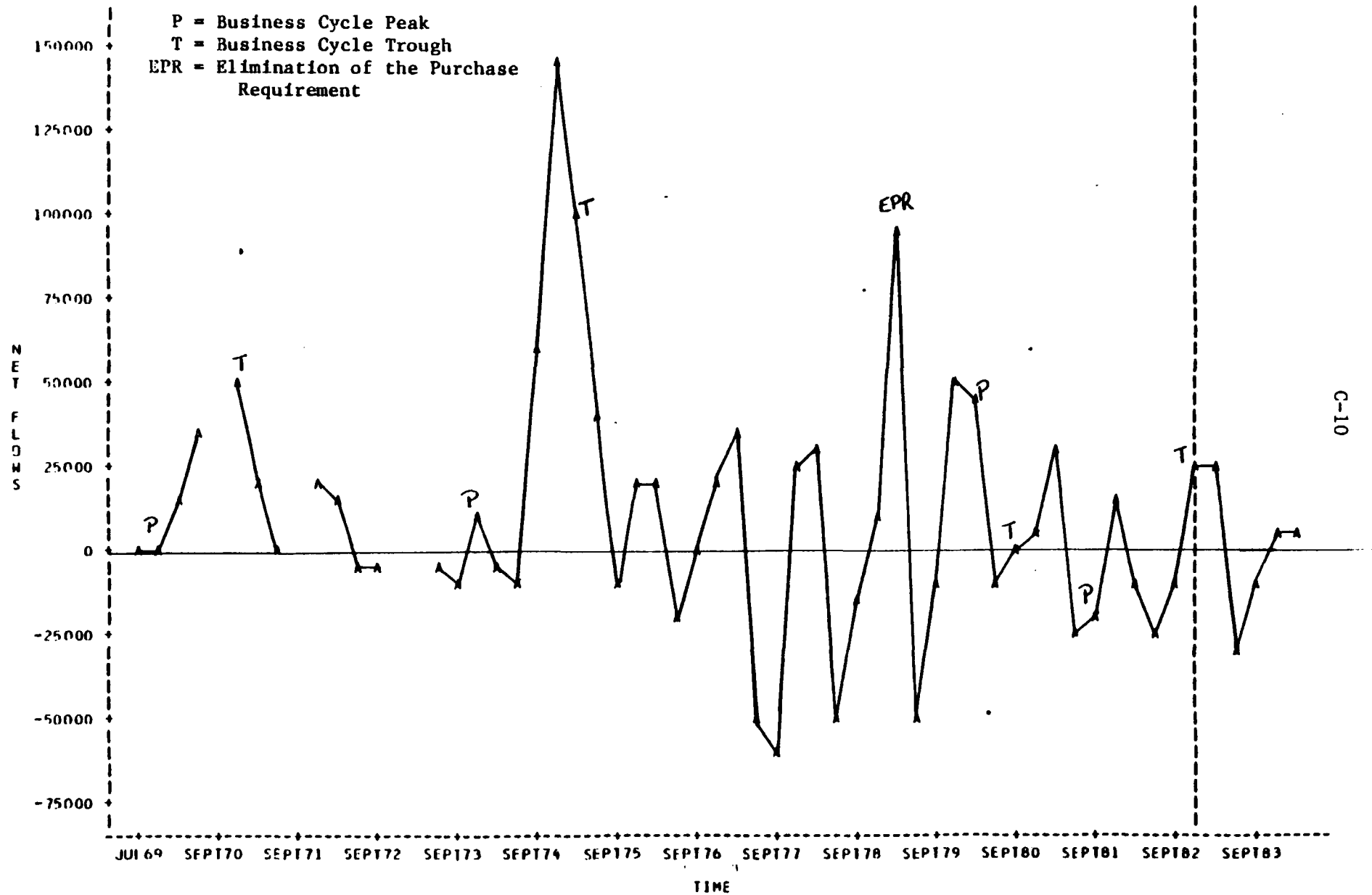
C-9

NOTE: Plot is interrupted where missing data occur.

Figure C.2

PLOT OF REGIONAL NET FLOWS BY TIME

NEW ENGLAND



NOTE: Plot is interrupted where missing data occur.

Figure C.3

PLOT OF REGIONAL NET FLOWS BY TIME
MID ATLANTIC

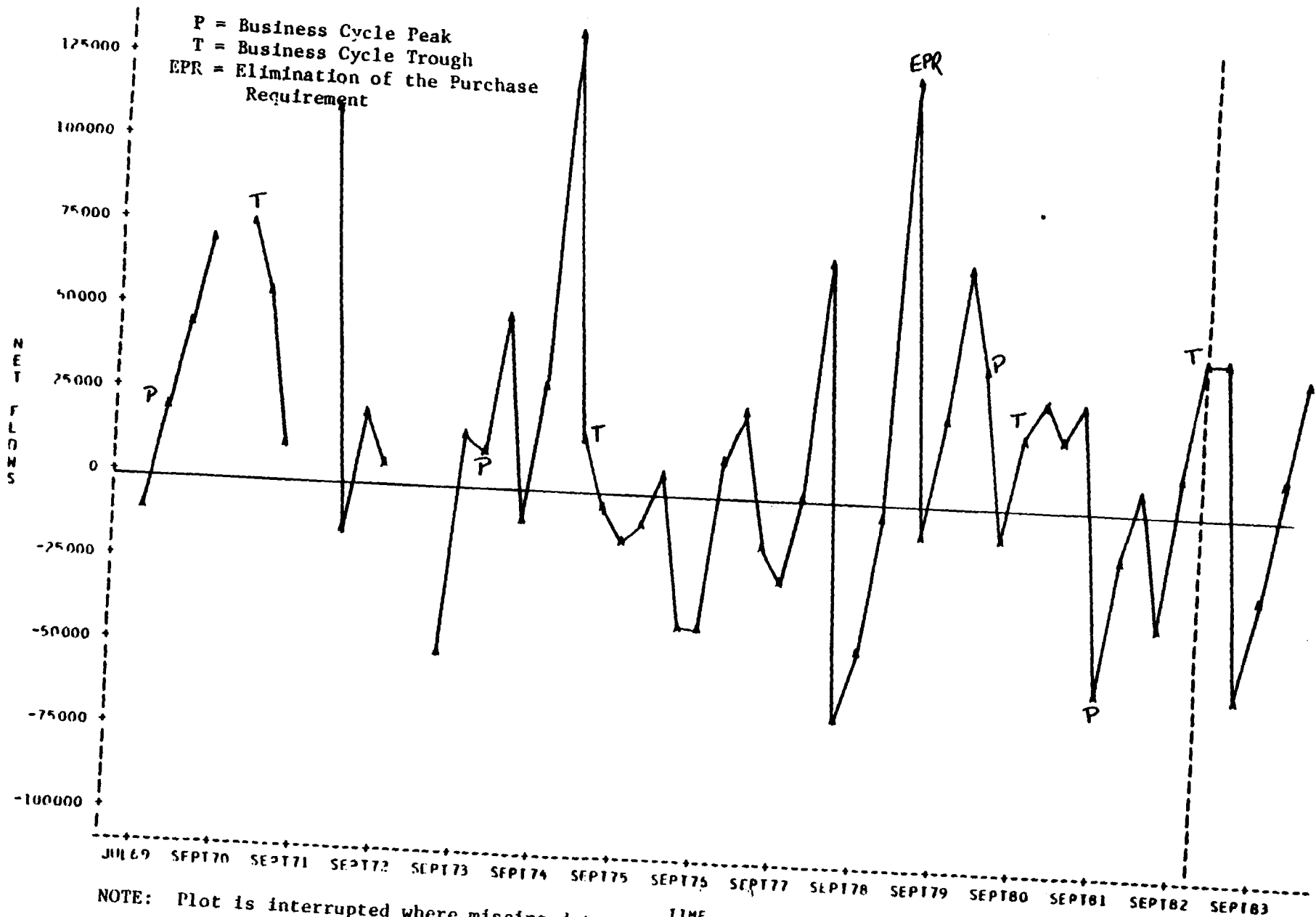


Figure C.4

PLOT OF REGIONAL NET FLOWS BY TIME

SOUTHEAST

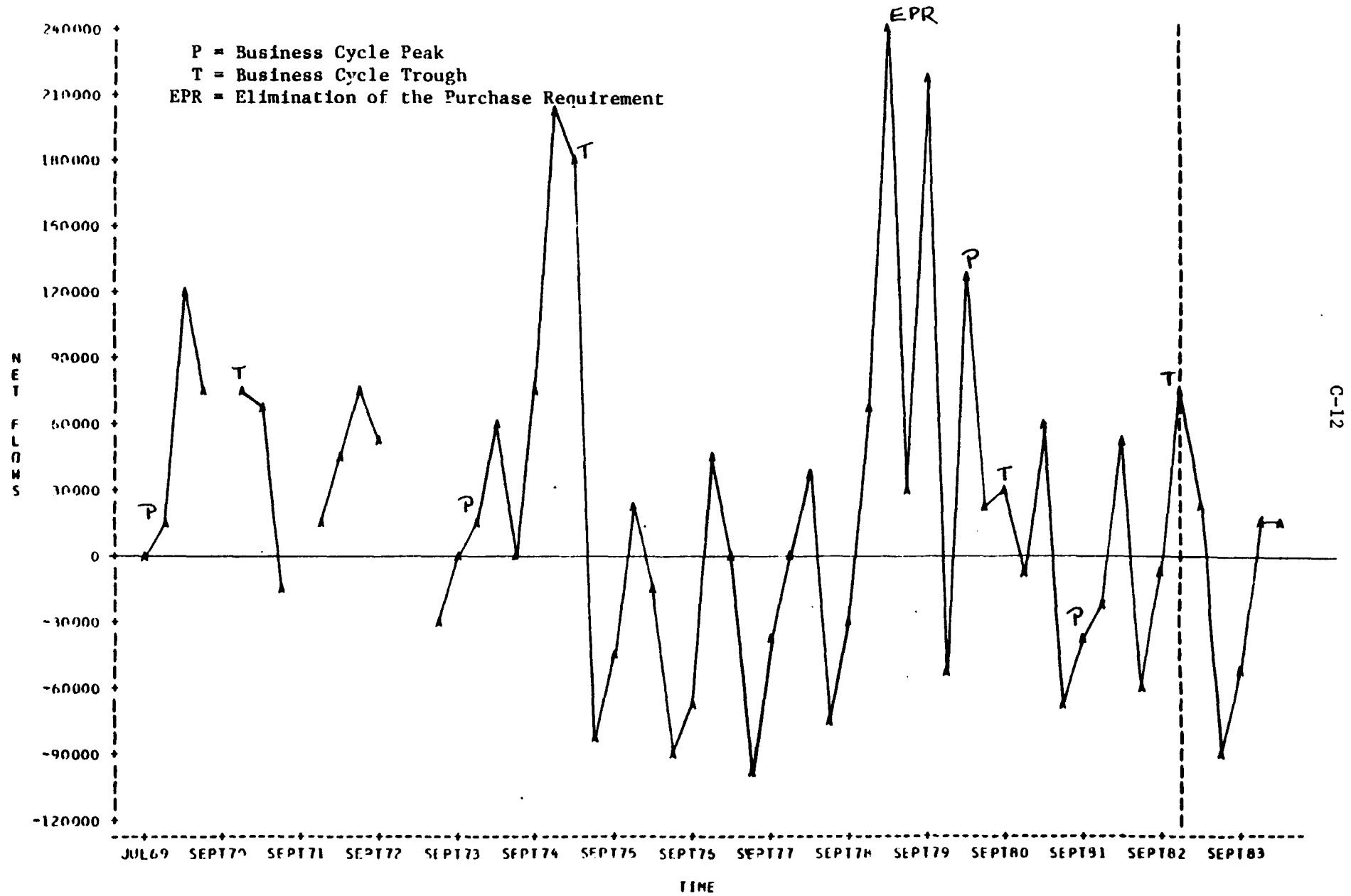


Figure C.5

PLOT OF REGIONAL NET FLOWS BY TIME

MIDWEST

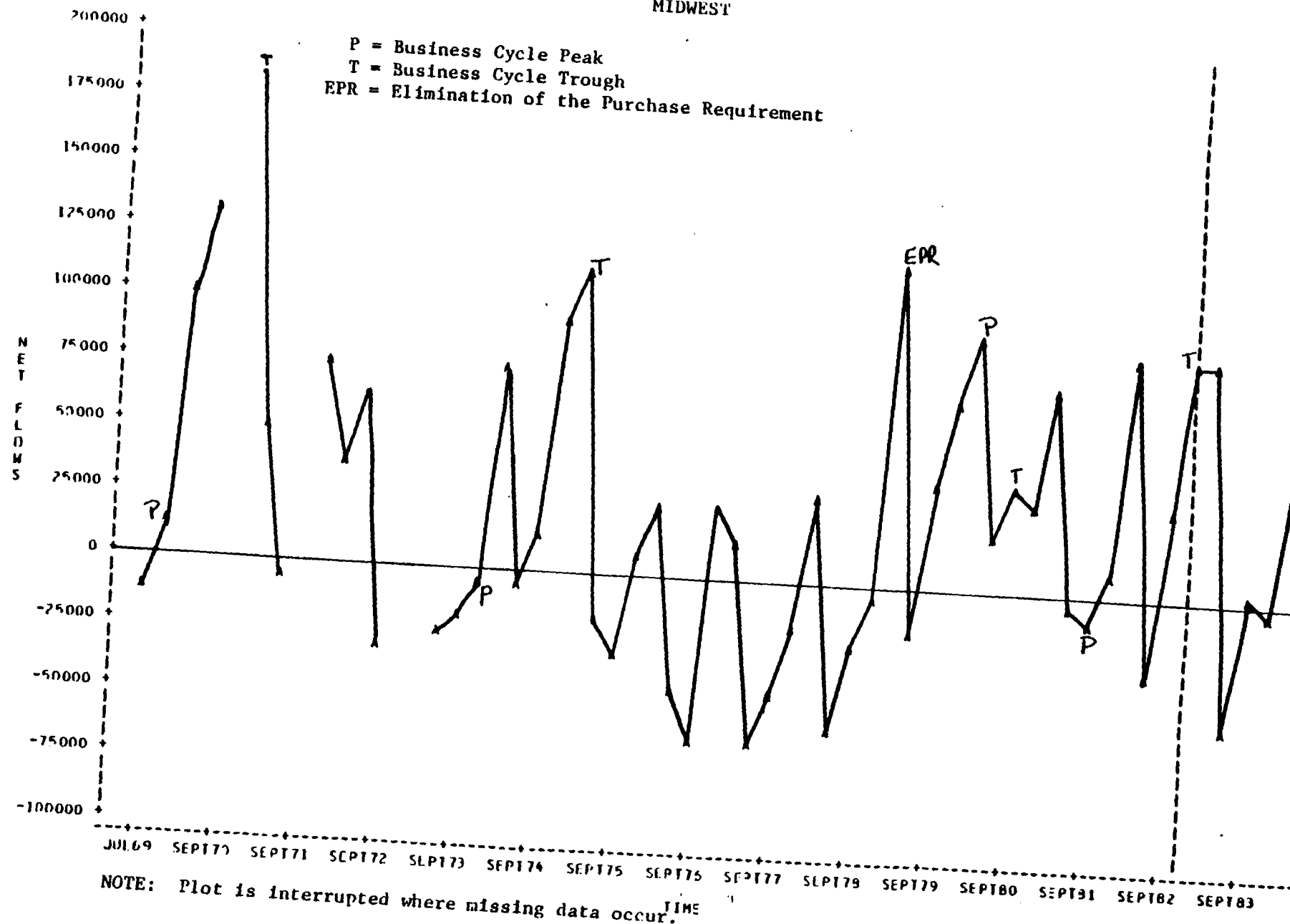


Figure C.6

PLOT OF REGIONAL NET FLOWS BY TIME

SOUTHWEST

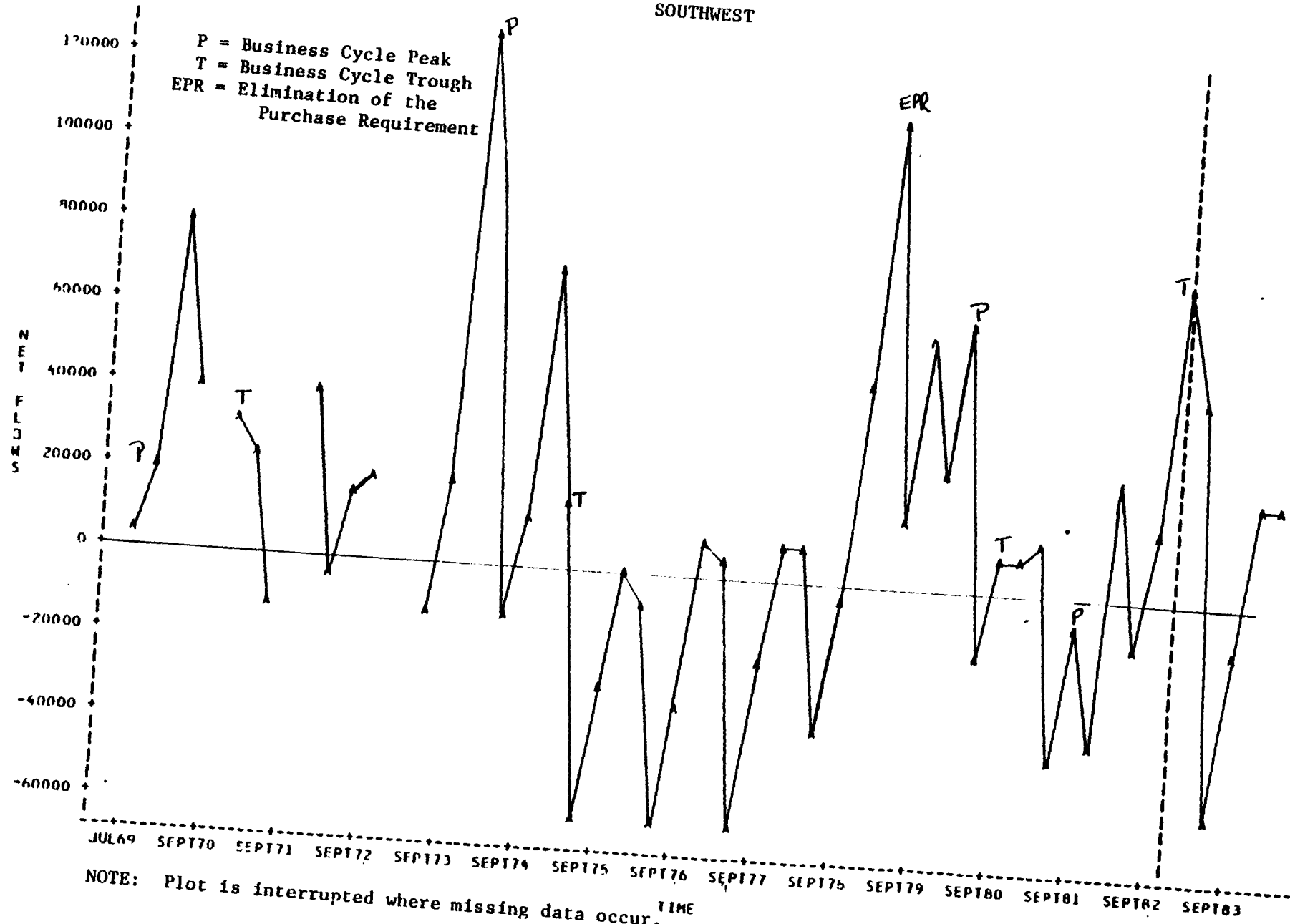


Figure C.7

PLOT OF REGIONAL NET FLOWS BY TIME

MOUNTAIN PACIFIC

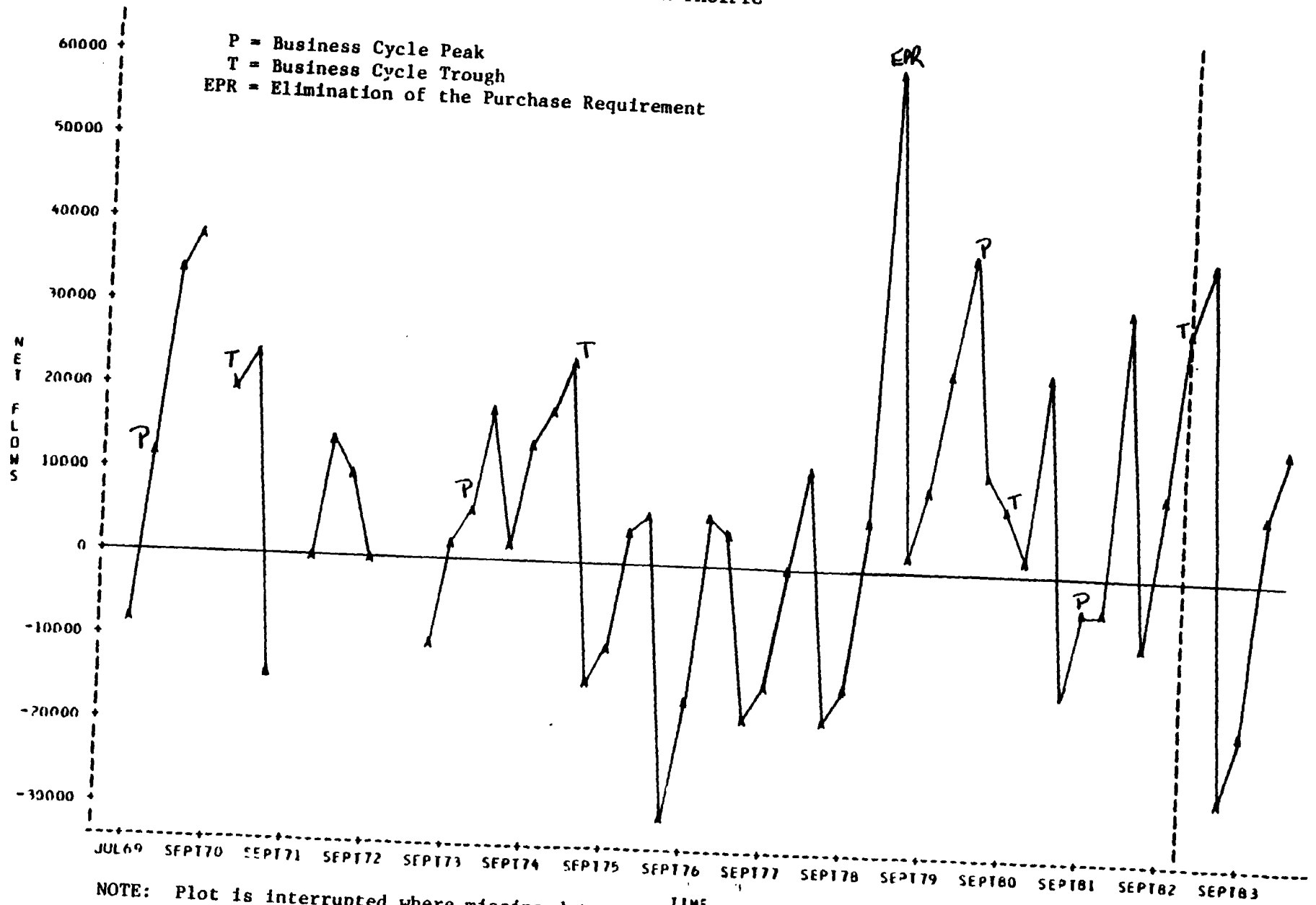
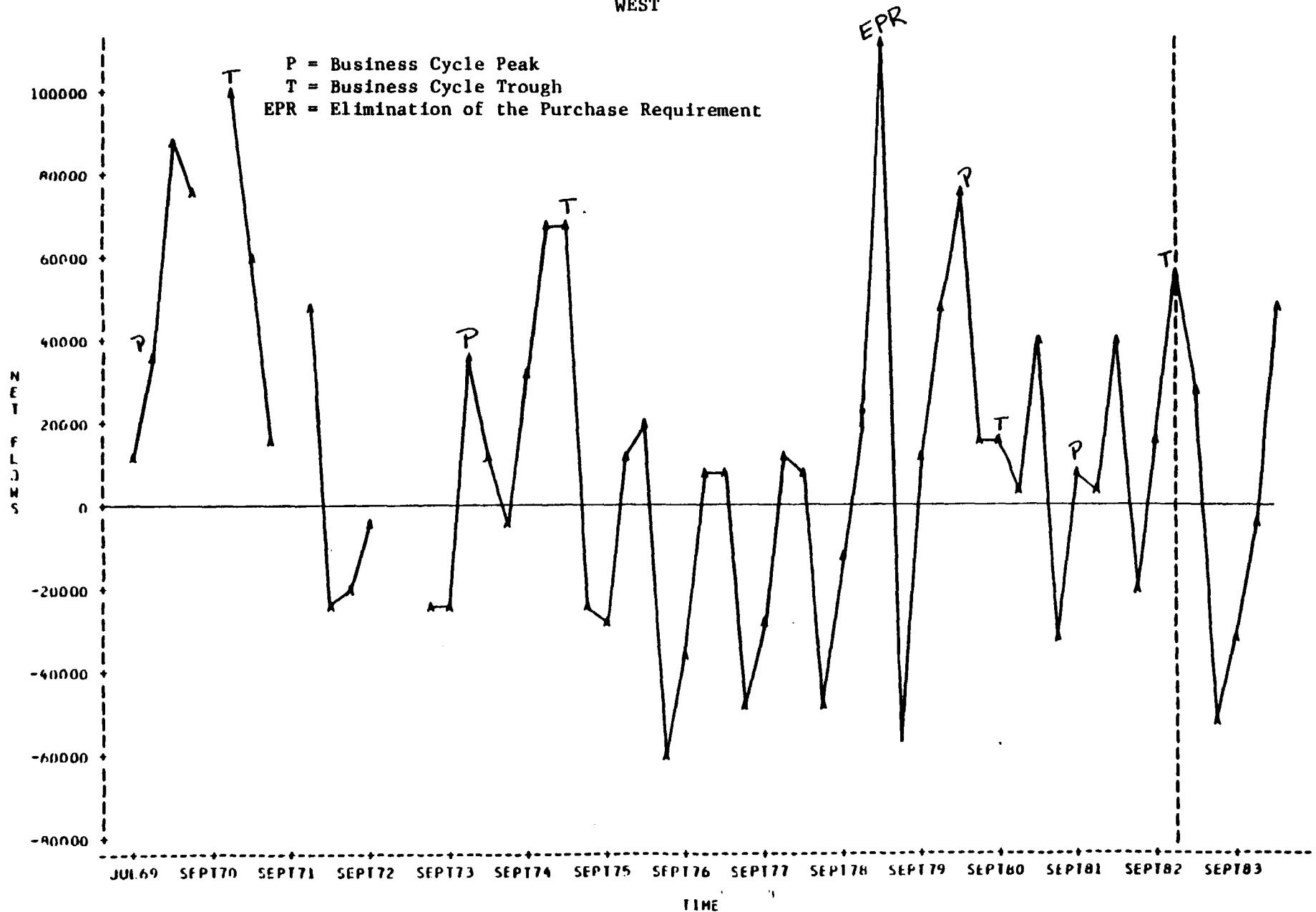


Figure C.8

PLOT OF REGIONAL NET FLOWS BY TIME

WEST



NOTE: Plot is interrupted where missing data occur.

The Net Flows Model

The conceptual framework on which the net flows model is based is the relationship between the stock of cases, case openings, and case closings and the exogenous factors which presumably affect program participation. Early experimentation with a preliminary statistical model involved ordinary least squares (OLS) regression analysis in which the dependent variable was the quarterly average of month-to-month change in the state food stamp caseload. The final model did not use OLS but employed a more sophisticated error structure to adjust for the complexities of using pooled cross-section and time series data. The explanatory variables for both models were chosen from the group of geographic, demographic, economic, and program variables shown in Table C.1.

The results of the preliminary analysis with OLS suggested that simple geographic effects do not appear to be significant and there is no evidence that economic effects vary significantly across regions. Alternative specifications regarding the economic variables hypothesized to be important showed that the rate of current and lagged unemployment, along with the insured unemployment rate, were critical. Various measures of income, such as average weekly earnings and the distribution of income, did not add significantly to the explanatory power of the model, nor did a measure of long term unemployment duration. The functional form of the relationship between the net flows and unemployment was nonlinear in nature. Finally, there was insufficient variation in the data to obtain estimates of the separate effects associated with the components of the 1981 OBRA legislation. The gross effects of the legislative packages did not appear to be significant.

After finalizing the variable specification, the model was estimated using a technique which takes into account the fact that the data are pooled

across states and across points in time.¹ The results of this estimation are shown in Table C.3. The estimated coefficient associated with each variable is shown along with the t-statistic.

The population distribution by age is significantly related to the net flow. Part of this is a simple size effect--larger populations may be expected to generate a larger net flow of cases. However, age effects are not uniform. Growth in the population under 5 years of age or between 18 and 44 is estimated to have a positive impact on the net flow while a negative impact is associated with growth in the 5 to 17 and over 65 age categories.

The elimination of the purchase requirement had a large, positive effect on the net flow of food stamp cases. AFDC case openings and case closings are directly related to the change in the food stamp caseload. The effects of both measures are in the expected direction and are of the same order of magnitude.

The most significant economic effects on the net flows operate through the measures of unemployment. To estimate the marginal effect of a change in the unemployment rate, all the coefficients associated with measures of URATE must be taken into account. Estimates from the final specification suggest that as the unemployment rate rises, the net flow will rise, but not in a linear fashion. The marginal effect is muted the lower the initial level of the unemployment rate or the higher the insured unemployment rate. In addition, changes in unemployment rates have a lagged effect. If the rate is

1. The statistical model of the net flows can be viewed as a type of "error components" model in which the error structure is comprised of three components. One component is associated with time--observations at one point in time are related to previous observations. A second component is peculiar to cross-section units--all observations from a particular state have some common characteristics. Last, a purely random component. The "error components" estimates are not far different than the ordinary least squares regression estimates although the latter assume a much simpler error structure.

Table C.3

FULLER AND BATTESE "ERROR COMPONENTS" ESTIMATES
1976-1983

Dependent Variable: Net Flow of
Food Stamp Cases

Sample Size =
1600

<u>Variable</u>	<u>Parameter Estimate</u>	<u>t ratio</u>
Intercept	12079.4	0.7
M. Atlantic	-527.2	-0.5
Midwest	-117.1	-0.1
Southwest	-679.5	-0.6
Mt. Plains	128.6	0.1
Western	-932.0	-1.0
Southeast	-400.9	-0.3
POP UNDERS	15490.7	2.5**
POP 5-17	-11128.3	-2.9**
POP 18-44	2245.6	2.2**
POP 45-64	8040.1	1.5
POP 65 PLUS	-7757.0	-2.0**
EPR	13292.8	4.3**
OBRA 81	1055.1	0.3
OBRA 82	-991.9	-0.4
PROJECTS	-3.9	-0.4
MAX FSBENR	34.1	1.1
AFDC OPEN	0.7	8.6**
AFDC CLOSE	-0.7	-9.7**
MAX AFDCBENR	-1.3	-0.3
AVG SOCSECR	-82.8	-1.2
AVG SSIR	-7.8	-1.3
BC PEAK	5078.5	1.1
BC TROUGH	-1965.1	-0.4
PEAK LEAD	-2973.0	-1.0
TROUGH LEAD	-1398.0	-0.5
YPCAPR	-353.8	-1.1
URATE	1224.2	4.1**
IURATE/URATE	3831.8	2.0**
URATE(-1)	-991.4	-3.4**
URATE*PEAK	-428.2	-0.9
URATE*TROUGH	551.3	1.5
1977	934.1	0.4
1978	2592.8	1.0
1979	-2479.5	-0.6
1980	-9466.4	-2.2**
1981	-10910.2	-2.5**
1982	-11501.5	-2.0**
1983	-12434.0	-2.1**

**Significant at the .95 level or better.

rising through time, there is an even greater tendency for the net flow to rise in the face of a fixed percentage increase in unemployment rates.

To capture more fully the variance in the net flows, dummy variables representing each year (1976 was the omitted year) were included. For every year since 1979 the estimates suggest that an effect is operating to significantly reduce the net flow relative to that obtained in 1976. In 1977 and 1978 the estimated effect was positive, although insignificant. This may have reflected the after-effects of rapid program growth which was sustained through the mid-1970's. In 1979 the estimated effect was negative but was insignificant. Since 1979, the effect has been highly significant and growing in magnitude, at least through 1983. Note that this effect is separate from that which can be attributed to 1981 or 1982 OBRA changes, as these are control variables in the equation. Also, the effect is first observed in 1980--before OBRA implementation had begun.

APPENDIX D

ANALYSIS OF THE INTERACTION BETWEEN THE MACROECONOMY AND THE FOOD STAMP PROGRAM (DRI MODEL)

This Appendix describes the data and methods used to develop a quarterly macroeconomic model of the Food Stamp Program. A two equation model was specified--one equation predicts the food stamp caseload and one predicts the average benefit per recipient. The model was used in conjunction with a set of general DRI models of the macroeconomy to produce a counterfactual estimate of the food stamp caseload and costs. The purpose of the counterfactual was to demonstrate the effects of the macroeconomy on the Food Stamp Program. Thus, the caseload and benefits were estimated, assuming that the 1981-82 recession did not take place. The discussion below briefly summarizes the food stamp model and the results of the counterfactual.

Development of a Macroeconomic Model of the Food Stamp Program

The model was estimated using quarterly observations for the 1976-1983 period, inclusive. The character of the Food Stamp Program changed significantly in 1974 when it was expanded to a nationwide program. Thus, data before the expansion were not appropriate for this estimation. Initial model estimations included all quarterly data since the expansion (1974:4), but results were significantly improved when data during the transition period (1974:4-1975:4) were omitted. Thus, there were 32 quarterly time series observations used for each final equation.

Quarterly data were available for each of the nine Census divisions.¹ Originally, separate equations were estimated for each of the divisions. However, since such a small number of observations severely restricted the number variables that could be included in any one equation, a pooled cross-section time series approach was followed.² Two pooling strategies were followed. One combined all of the observations for a single national equation yielding a total pool of 288 observations (9 divisions with 32 quarterly time series each). The other strategy combined the Census divisions into the four main Census regions: Northeast (New England and Mid-Atlantic), South (South Atlantic, East South Central, and West South Central), North Central (East North Central and West North Central), and West (Pacific Northwest and Pacific Southwest). This second strategy facilitated modelling the different regional variation in caseload behavior. As explained in the discussion below, the two different strategies were followed for each of the two equations.

The Food Stamp Reciprocity Equation. The dependent variable in the food stamp reciprocity equation is the number of food stamp recipients divided by the population in each region. The reciprocity rate was used instead of the level of recipients in order to standardize the effect of each of the coefficients across regions. That is, a one percentage point increase in the unemployment rate in a region with a large population produces a larger effect on the number of food stamp recipients than in a region with a smaller population. However, the effect of the unemployment rate on the reciprocity rate is likely to be similar across regions, after controlling for other

1. The nine divisions are: New England, Middle Atlantic, South Atlantic, West South Central, East South Central, East North Central, West North Central, Pacific Northwest, and Pacific Southwest.

2. Multicollinearity prevented reliable estimates of variable coefficients when only 32 observations were available for each equation.

variables which influence the regional caseload. Thus, all explanatory variables are also in rate rather than level form.

Table D.1 defines the variables used in the final food stamp reciprocity rate equations, and Table D.2 presents the equation results. The final model consisted of a single-equation for each of three Census regions--the South, the North Central, and the West, and separate equations for the New England and Mid-Atlantic divisions in the Northeast Census region. A single equation for the Northeast produced unsatisfactory results because the food stamp caseload exhibited very different patterns in these two divisions (and they differed from all other Census divisions). For the final pooled cross-section time series equations in the South, the North Central, and the West statistical test were performed for equality of regression coefficients for the Census divisions contained in each region. Where regression coefficients differed, interaction terms were introduced as shown below.

The unemployment rate was a significant predictor variable in all equations except the Mid-Atlantic. The higher the unemployment rate, the higher the food stamp reciprocity rate. However, the size of this effect often differed by Census division. As indicated in Table D.2, interaction terms had to be introduced to account for these geographic differences in the three pooled Census region equations. In addition, the unemployment rate had an insignificant effect in the Mid-Atlantic equation. Other variables were introduced to further explain the effect of unemployment on the food stamp reciprocity rate. The fraction of the unemployed who have been unemployed for at least 52 consecutive weeks (RD52) was a significant positive predictor variable in the North Central and West equations. As more of the unemployed exhaust their UI benefits, more become eligible for food stamps. Other specifications of the unemployment effect were not satisfactory and,

Table D.1

VARIABLES INCLUDED IN THE FOOD STAMP RECIPIENCY RATE MODEL

<u>Variable</u>	<u>Definition</u>
ELIMPR	Modified dummy variable indicating the elimination of the purchase requirement in the Food Stamp Program ¹
ELIMPR*SATL	ELIMPR interacted with dummy variable indicating South Atlantic region
ELIMPR*ESC	ELIMPR interacted with dummy variable indicating East South Central region
OBRA81	Modified dummy variable indicating the implementation of the 1981 OBRA legislative changes in the Food Stamp Program ¹
RAFDCB	Ratio of the number of AFDC recipients to total population
RAFDCB*SATL	RAFDCB interacted with dummy variable indicating South Atlantic region
RAFDCB*ESC	RAFDCB interacted with dummy variable indicating East South Central region
RAFDCB*ENC	RAFDCB interacted with dummy variable indicating East North Central region
RAFDCB*PNW	RAFDCB interacted with dummy variable indicating Pacific North West region
RD52	Percent of the unemployed who have been unemployed for more than 52 weeks
RHO	Term introduced for correction of autocorrelation among error terms
RHO*ENC	RHO interacted with dummy variable indicating the East North Central region
RHO*ESC	RHO interacted with dummy variable indicating East South Central
RHO*PNW	RHO interacted with dummy variable indicating the Pacific North West region
RHO*PSW	RHO interacted with dummy variable indicating the Pacific South West region
RHO*SATL	RHO interacted with dummy variable indicating South Atlantic region
RHO*WNC	RHO interacted with dummy variable indicating the West North Central region
RHO*WSC	RHO interacted with dummy variable indicating the West South Central region
RPOVERTY	Ratio of the number of people below poverty line to total population
RU	Civilian unemployment rate
RU*ENC	RU interacted with dummy variable indicating East North Central region
RU*ESC	RU interacted with dummy variable indicating East South Central region
RU*PNW	RU interacted with dummy variable indicating Pacific North West region
RU*SATL	RU interacted with dummy variable indicating South Atlantic region
RWEEA	Real wage rate

1. Proportion of states that implemented the legislation by the end of a quarter, weighted by state caseloads.

Table D.2

FOOD STAMP RECIPIENCY RATE MODEL

Dependent Variable: Number of Food Stamp Recipients/Total Population

SOUTH		NORTH CENTRAL		WEST	
<u>Independent Variable</u>	<u>Coefficient</u>	<u>Independent Variable</u>	<u>Coefficient</u>	<u>Independent Variable</u>	<u>Coefficient</u>
Constant	-8.507**	Constant	-2.220**	Constant	-5.247**
RU	.305**	RU	.100*	RU	.114**
RU*SATL	-.145*	RU*ENC	-.019	RU*PNW	.149**
RU*ESC	.155*	RD52	.050**	RD52	.030*
RD52	.045	RWEEA	-.032	RWEEA	-.159**
RWEEA	-.051	RPOVERTY	.495**	RPOVERTY	.504**
RPOVERTY	.382**	RAFDCB	.229	RAFDCB	1.438**
RAFDCB	2.745**	RAFDCB*ENC	.432**	RAFDC*PNW	.138
RAFDCB*SATL	-.237*	ELIMPR	.679**	ELIMPR	1.412**
RAFDCB*ESC	-.629**	OBRA81	-.146	OBRA81	-.538**
ELIMPR	2.392**	RHO*ENC	.223	RHO*PNW	.100
ELIMPR*SATL	-.519**	RHO*WNC	.355*	RHO*PSW	-.170
ELIMPR*ESC	1.462**				
OBRA81	-.083	R ²	.992	R ²	.916
RHO*SATL	.436				
RHO*ESC	.386				
RHO*WSC	.508				
R ²	.980				
NEW ENGLAND		MID ATLANTIC			
<u>Independent Variable</u>	<u>Coefficient</u>	<u>Independent Variable</u>	<u>Coefficient</u>		
Constant	-2.445	Constant	-11.421**		
RAFDCB	1.542**	RAFDCB	1.965**		
RU	.288**	RU	.008		
RPOVERTY	.061	RPOVERTY	.729**		
ELIMPR	.012	ELIMPR	1.363**		
OBRA81	.290	OBRA81	-.369		
DUMSS	.802**	RHO	.124		
RHO	.194	R ²	.946		
R ²	.912				

therefore, excluded from the final model specifications. Alternative specifications included lags, non-linear forms, and the duration of unemployment.

The real wage rate (RWEEA) was included in the three pooled equations, but it was significant only in the North Central and West equations. The higher the real wage rate, the lower the food stamp reciprocity rate. This variable proxies general economic conditions and was expected to be negatively correlated with the food stamp caseload. The poverty rate (RPOVERTY) was included in all equations and it was significant in all but the New England equation. This variable is a proxy for a large part of the population eligible for food stamps. Other specifications of the size of the low income population eligible for food stamps such as the percent with incomes below 130 percent of the poverty line were tested but did not produce satisfactory results.

The reciprocity rate in the AFDC program (RAFDCB) was a significant variable in all of the equations, but its impact differed sharply across the geographic divisions. Most AFDC recipients participate or are at least eligible for food stamps. Thus, this variable had a consistently positive effect on the food stamp reciprocity rate.

Several variables were introduced to explain differences in the Food Stamp Program during the period. The elimination of the purchase requirement had a large positive effect on the caseload, and the variable ELIMPR is positive and significant in all but the New England equation. A dummy variable indicating implementation of the 1981 OBRA legislation was significant only in the West equation. Its sign, however, was consistently negative in all but the New England equation. Initial tests for existence of

autocorrelation of the error terms were positive.¹ Corrections were made for this error and these are included as the RHO variables in each equation as shown in Table D.2.²

The results for the two Northeastern divisions proved to be the most unsatisfactory. Because of the small number of observations, it was necessary to limit the number of explanatory variables. In addition, many of the variables did not perform well in the New England equation. The Food Stamp Program variables were both insignificant as was the poverty rate. The variable (DUMSS) was included to explain an unusual single quarter increase in the caseload caused by snow emergency conditions in Massachusetts.

The forecasting performance of the entire model was quite good, however. The food stamp recipient model's performance was evaluated over the 1976-1983 period and for 1983 alone. The forecast error was measured in two ways. First, a simple average of the quarterly percentage discrepancies was calculated. Second, the square root of the sum of the squared quarterly percentage discrepancies was calculated. This second measure, the "root mean squared percentage error", adds up both positive and negative discrepancies and gives a better measure of the total forecast error. The average percent forecast error was 0.0 over the 1976-1983 period and .5 percent for 1983. The root mean squared percentage error was 2.3 percent for the 1976-1983 period and 1.6 percent for 1983. Thus, both statistics indicate that the reciprocity model performed well.

Table D.3 shows the estimated effect of each variable in the final equations on the level of the food stamp caseload. The 1983 population in

1. The standard Durbin-Watson statistic was used to test for autocorrelation.

2. The RHO variables were calculated according to the Cochran-Orcutt method.

Table D.3

ESTIMATES OF THE EFFECT OF EXPLANATORY VARIABLES ON THE
LEVEL OF THE FOOD STAMP CASELOAD IN 1983¹

Variable	Division									Total Caseload Effect
	NENG	MATL	SATL	ESC	WSC	ENC	WNC	PNW	PSW	
CONSTANT	-306,200	-4,231,000	-3,301,000	-1,270,000	-2,196,000	-913,500	-381,700	-510,700	-1,985,000	-15,095,100
RUQ2	35,970	2,800	62,190	22,430	78,860	33,340	17,380	25,670	41,420	320,060
RD52	----	----	17,490	6,730	11,630	20,590	8,640	2,940	10,930	78,950
RWEEA	----	----	-19,720	-7,589	-13,120	-13,210	-5,540	-15,540	-57,720	-132,439
POVERTY ²	7,576	270,057	148,738	57,342	99,457	205,454	85,896	49,658	183,261	1,107,439
AFDCBR ²	191,520	727,903	976,311	317,533	714,446	274,353	39,807	155,119	522,486	3,919,478
ELIMPR	1,000	503,900	726,820	139,090	618,000	281,900	118,300	138,000	512,570	3,039,580
OBRA81	36,240	-137,100	-32,230	-12,380	-21,410	-60,708	-25,480	-52,600	-195,400	-501,068
DUMSS ²	99,961	----	----	----	----	----	----	----	----	----
RHO	71,988	45,786	169,719	57,927	155,654	92,558	61,585	9,849	-61,753	377,562
Population Share	5.3%	15.8%	16.6%	6.4%	11.1%	17.7%	7.4%	4.2%	15.5%	100%

1. The explanatory variables in the reciprocity rate equations (Table D.2) were converted to level form using the 1983 population in that region.

2. Calculated from equation results and 1983 population; others were supplied by DRI, Inc.

each Census division was used to translate the reciprocity rate equation into level form. The last column shows the national caseload effect.

Food Stamp Benefit Equation. The dependent variable in the benefit equation is the percentage change in the real average food stamp benefit per recipient. The advantage of this specification of the dependent variable is that it captures the fact that a general percentage increase in the food stamp allotment translates into different percentage increases in benefits for food stamp recipients, depending on their benefit level. That is, when the maximum food stamp allotment is adjusted (by applying the change in the Thrifty Food Plan to the previous maximum allotment), this generates a fixed dollar increase for each household size. Households with smaller benefits, therefore, receive larger percentage increases than those at the maximum. The dependent variable was estimated in real terms in order to highlight the effect of explanatory variables other than the increase in food prices.¹

Table D.4 defines the variables used in the food stamp benefits equation and Table D.5 presents the results. Since adjustments in food stamp benefits are made uniformly across the nation a single equation was estimated, pooling the time series data for all nine Census divisions. Tests on the equality of the coefficients of the equation across the divisions showed that none were statistically different.

As shown in Table D.5 the percentage change in the real maximum allotment for a family of four (PRMAXALLOT4), dominates the equation with a coefficient of about 1.7. This result indicates that a ten percent increase in the real maximum allotment leads to a 17 percent increase in the average real benefit per person. As discussed earlier, the average percentage increase in benefits

1. The food stamp benefit and the maximum allotment variables were deflated by the CPI for food at home, while other income variables were deflated by the CPI for all items.

Table D.4

VARIABLES INCLUDED IN THE FOOD STAMP BENEFIT EQUATION

<u>Variable</u>	<u>Definition</u>
ELIMPR	Modified dummy variable indicating elimination of purchase requirement in the Food Stamp Program ¹
OBRA81	Modified dummy variable for 1981 OBRA legislation ¹
OBRA82	Modified dummy variable for 1982 Amendments ¹
PRAVGAFDC	Percent change in average AFDC benefit per recipient deflated by CPI for all items
PRMAXALLOT4	Percent change in maximum food stamp allotment for a family of 4, deflated by CPI for food at home
PRMNDEF	Percent change in mean income deficit below the poverty line, deflated by CPI for all items
PRWSD%N	Percent change in wage and salary disbursements per capita, deflated by CPI for all items
RHO*ENC	Correction for autocorrelation in error terms, interacted with dummy variable indicating East North Central region
RHO*ESC	Correction for autocorrelation in error terms, interacted with dummy variable indicating East South Central region
RHO*MATL	Correction for autocorrelation in error terms, interacted with dummy variable indicating Mid Atlantic region
RHO*NENG	Correction for autocorrelation in error terms, interacted with dummy variable indicating New England region
RHO*PNW	Correction for autocorrelation in error terms, interacted with dummy variable indicating Pacific North West region
RHO*PSW	Correction for autocorrelation in error terms, interacted with dummy variable indicating Pacific South West region
RHO*SATL	Correction for autocorrelation in error terms, interacted with dummy variable indicating South Atlantic region
RHO*WNC	Correction for autocorrelation in error terms, interacted with dummy variable indicating West North Central region

1. Proportion of states that implemented the legislation by the end of a quarter, weighted by states' caseloads.

Table D.5

AVERAGE FOOD STAMP BENEFIT PER RECIPIENT
(1967 Dollars)

Dependent Variable: Percent Change in Average Benefit Per Recipient

<u>Interpendent Variable</u>	<u>Coefficient</u>
PRMAXALLOT4	1.691**
PRAVGAFDC	-.156**
PRWSD%N	-.409**
PRMNDEF	.222
ELIMPR	.365
OBRA81	-2.532**
OBRA82	2.021**
RHO*NENG	-.345**
RHO*MATL	-.457**
RHO*SATL	-.313*
RHO*ESC	-.181
RHO*WSC	-.125
RHO*ENC	-.173
RHO*WNC	- .387**
RHO*PNW	- .190
RHO*PSW	- .202
R ²	.820

is significantly larger than the percentage change in the maximum allotment since most recipients do not receive the maximum allotment. The percentage change in the real average AFDC benefit (PRAVGAFDC) was a significant explanatory variable and, as expected, is negatively related to the food stamp benefit. The food stamp benefit, of course, is adjusted to offset changes in other income sources. The per capita real wage and salary disbursements variable (PRWSDZN) was also significant and negatively related to the food stamp benefit. This macroeconomic variable is intended to indicate that rising real incomes lead to falling average food stamp benefits. The real poverty deficit (PRMNDEF) is the difference between the average income of families below the poverty line and the actual poverty line. This variable was very significant ($t=6.3$) and positively related to the percent change in the average food stamp benefit. As the deficit rises so will the food stamp benefit to offset part of the income loss.

The policy variable to indicate the elimination of the purchase requirement (ELIMPR) was not significant. The primary effect of this legislation was an increase in the caseload. Most evidence indicates that its effect on the average benefit was positive (that is, the new participants tended to have lower average incomes than the existing caseload).¹ These results were consistent with that finding but the effect was not significant.

In contrast, both the OBRA81 and OBRA82 policy variables were significant. As expected, OBRA81 had a negative effect on real benefits because of the COLA delay. The fact that OBRA82 had a positive effect is somewhat perplexing. The October 1982 catch-up COLA would have been captured in the maximum allotment variable. However, the 1981 OBRA legislation

1. See Food and Nutrition Service (1981).

reinstated the net income test for non-elderly, non-disabled households at 100 percent of poverty. It is possible that relatively high-income, low-benefit households left the program because of this provision, increasing the average per capita benefit of those who remained on the caseload.

The RHO variables indicate the first-order autocorrelation corrections interacted with dummy variables for each Census diversion. The overall R-square statistic of the equation was .8197--a good fit for a variable estimated in first-difference form. Various other variables were tried but eliminated from the final model. An average SSI benefit variable proved unsatisfactory, as did an average per capita income variable, and the relative price of food.

The forecasting performance of the food stamp benefits model was also quite good. The mean percent error for the entire 1976-1983 period was less than 1 percent, and the root mean squared percent error was 2.7 percent. The model's performance for just the 1983 forecast was essentially the same.

The Impact of a "No-Recession" Scenario on The Food Stamp Program

The food stamp caseload and benefits equations were used to estimate the Food Stamp Program under an assumption that the 1981-82 recession did not take place. The counterfactual results demonstrate the impact that the economy can have on the program. Since it is countercyclical these effects are very strong.

The counterfactual economic scenario assumed that the economy was growing continuously throughout the period. Table D.6 shows the differences between three key macroeconomic variables in the counterfactual scenario compared to the historic values. In the no-recession scenario, real gross national product was assumed to grow by 8.2 percent over the forecast period (1981:1 through 1983:4), whereas actual growth was only 3.9 percent.

Table D.6
COUNTERFACTUAL MACROECONOMIC ASSUMPTIONS

Forecast Quarter	Real GNP (Billions)			Civilian Unemployment Rate			Inflation		
	Actual	No Recession	Difference	Actual	No Recession	Difference	Actual	No Recession	Difference
1981:1	1,514.5	1,517.2	3.7	7.43	7.33	-.11	11.38	10.80	-.58
1981:2	1,511.7	1,532.9	21.2	7.33	6.98	-.35	8.73	9.02	.29
1981:3	1,522.1	1,560.6	38.5	7.43	6.77	-.66	11.47	12.89	1.42
1981:4	1,501.3	1,558.7	57.4	8.23	7.17	-1.06	6.78	8.33	1.55
1982:1	1,483.5	1,560.2	76.7	8.83	7.22	-1.61	3.76	4.40	.64
1982:2	1,480.5	1,587.7	107.2	9.43	7.25	-2.18	5.47	7.05	1.58
1982:3	1,477.1	1,600.2	123.1	10.00	7.34	-2.66	7.20	9.63	2.43
1982:4	1,478.8	1,599.4	120.6	10.60	7.66	-2.94	1.56	3.79	2.23
1983:1	1,491.0	1,606.5	115.5	10.37	7.38	-2.98	.32	1.43	1.11
1983:2	1,524.8	1,629.0	105.0	10.10	7.34	-2.76	4.34	5.86	1.53
1983:3	1,550.2	1,638.9	88.7	9.40	7.08	-2.32	4.15	6.19	2.04
1984:4	1,572.7	1,640.7	68.0	8.47	6.81	-1.66	4.43	6.05	1.62

The peak difference between the counterfactual and the historic simulations occurred in 1982:3 when real GNP was 8 percent higher in the counterfactual. The unemployment rate was fairly stable in the counterfactual at approximately 7 percent throughout the forecast period, while the historic unemployment rate rose to 10.6 percent in 1982. The inflation rate was also significantly different in the counterfactual. It peaked at 9.6 percent in 1982:3, compared to a 7.2 percent historic rate.

These values were the result of imposing a significant increase in the money supply in the DRI model of the U.S. Economy so that the economy averted two consecutive quarters of decline in real GNP. This scenario was chosen to demonstrate the effect of the macroeconomy on the Food Stamp Program, and not to construct a realistic scenario assuming that different economic policies had been followed in the 1981-82 period. The no-recession scenario represented an extremely optimistic picture of what might have happened if a looser monetary policy had been followed. Thus, the simulation results present a range of outcomes for the Food Stamp Program, with the historic results indicating the effects of a severe recession and the counterfactual results showing the effects of a very strong economy.

The DRI Demographic-Economic (DECO) model was used to simulate the distribution of income, given the final macroeconomic counterfactual. The DECO model simulates both demographic shifts in the U.S. population and changes in the distribution of income. In turn, the DRI Regional Information Service (RIS) model was run to simulate the outcomes in the nine Census divisions. The RIS model simulates the unemployment rate and the real wage rate for each of the nine divisions in the U.S. Subsequently, a set of bridge equations was used to simulate various variables not included in the DRI models, but included in the food stamp equations. Bridge equations are

regression equations that are not fully integrated with the DRI models, but provide forecasts of additional variables required by the food stamp model. The bridge equations forecast the AFDC reciprocity rate, average AFDC benefits, poverty rates at the regional level, the fraction of the unemployed whose unemployment duration exceeded 52 weeks, and the CPI for food at home.

Finally, the food stamp caseload and benefits equations presented earlier were used to forecast the program in the counterfactual simulation. Table D.7 shows the effect of the counterfactual scenario on the food stamp caseload in the first quarter of 1983. The results for each region and the total are shown. In addition, each column shows the impact of the important explanatory variables on the caseload. Table D.8 shows the effect of the counterfactual on the average real per capita food stamp benefit for the same quarter. The change in each explanatory variable and the net effect on the benefit are shown. Figures D.1 and D.2 show the food stamp caseload and benefits for the actual and the no-recession scenario, respectively.

A further examination of the results of the DRI counterfactual simulation in the context of the other analyses in this study implies that the results are overstated for two reasons. First, the counterfactual assumptions, which were selected after much discussion, were overly optimistic and probably contrasted the recession with an economy that could not have existed in the 1981-1983 period. Second, because of constraints on the number of variables that could be used in the DRI model, the unemployment variable overstated the response of the Food Stamp Program to a recession like the one of 1982-83. A more realistic estimate is provided in Chapter V of this report.

Table D.7

CAUSES OF THE CHANGE IN THE NUMBER OF FOOD STAMP
RECIPIENTS (THOUSANDS), BY DIVISION, 1983:1

Division	Poverty Level (1,000)	Unemploy. Rate (%)	Longterm Unempl. (1,000)	AFDC (1,000)	Real Wage (1,000)	Total Recipient Effect
New England						
Change in exp. variable	-183	-2.5	NA	-13	NA	
Effect on reciency	-12	-89	NA	-20	NA	-121
Mid-Atlantic						
Change in exp. variable	-542	-2.2	NA	-40	NA	
Effect on reciency	-396	-7	NA	-79	NA	-482
South Atlantic						
Change in exp. variable	-69	-2.7	-107	-114	+0.122	
Effect on reciency	-27	-322	-122	-312	-7	-790
East South Central						
Change in exp. variable	-27	-3.6	-46	-48	+0.143	
Effect on reciency	-10	-165	-38	-132	-3	-349
West South Central						
Change in exp. variable	-46	-1.7	-41	-77	+0.162	
Effect on reciency	-18	-135	-45	-211	-6	-415
East North Central						
Change in exp. variable	-964	-3.8	-213	-204	+0.140	
Effect on reciency	-469	-172	-182	-47	-5	-875
West North Central						
Change in exp. variable	-404	-2.2	-36	-53	+0.029	
Effect on reciency	-196	-41	-46	-12	-5	-296
Pacific Northwest						
Change in exp. variable	-203	-2.5	-25	-14	+0.168	
Effect on reciency	-103	-27	-15	-20	-8	-173
Pacific Southwest						
Change in exp. variable	-752	-2.6	-80	-105	+0.133	
Effect on reciency	-381	-101	-58	-153	-23	-716
Total USA						
Change in exp. variable	-3,190		-709	-669		
Effect on reciency	-1,612	-1,059	-506	-986	-57	-4,217

*Excluding effect of autocorrelated error term.

Table D.8

CAUSES OF THE CHANGE IN AVERAGE FOOD STAMP BENEFIT PER RECIPIENT IN
THE FIRST QUARTER OF 1983 ASSUMING NO RECESSION
(1967 \$)

	<u>Change in Explanatory Variable</u>				<u>Total Effect on Average Food Stamp Benefit Per Recipient</u>
	<u>Maximum Allotment</u>	<u>AFDC Benefit</u>	<u>Wage and Salary Disbursements</u>	<u>Poverty Deficit</u>	
New England	-.36	-.58	44.75	-107.60	-.47
Middle Atlantic	-.36	-2.10	1.32	-107.60	-.29
South Atlantic	-.36	-.66	34.83	-107.60	-.44
East North Central	-.36	-1.30	-18.78	-107.60	-.33
East South Central	-.36	-.64	38.65	-107.60	-.48
West North Central	-.36	-.67	13.43	-107.60	-.41
West South Central	-.36	.58	40.07	-107.60	-.65
Pacific Northwest	-.36	-1.12	50.70	-107.60	-.48
Pacific Southwest	-.36	-.02	33.71	-107.60	-.46
U.S. Average	-.36	-.78	20.31	-107.60	-.43

Figure D.1

PRIMARY MODEL
FOODSTAMP RECIPIENTS IN U.S.
ACTUAL VS. NO RECESSION SCENARIO

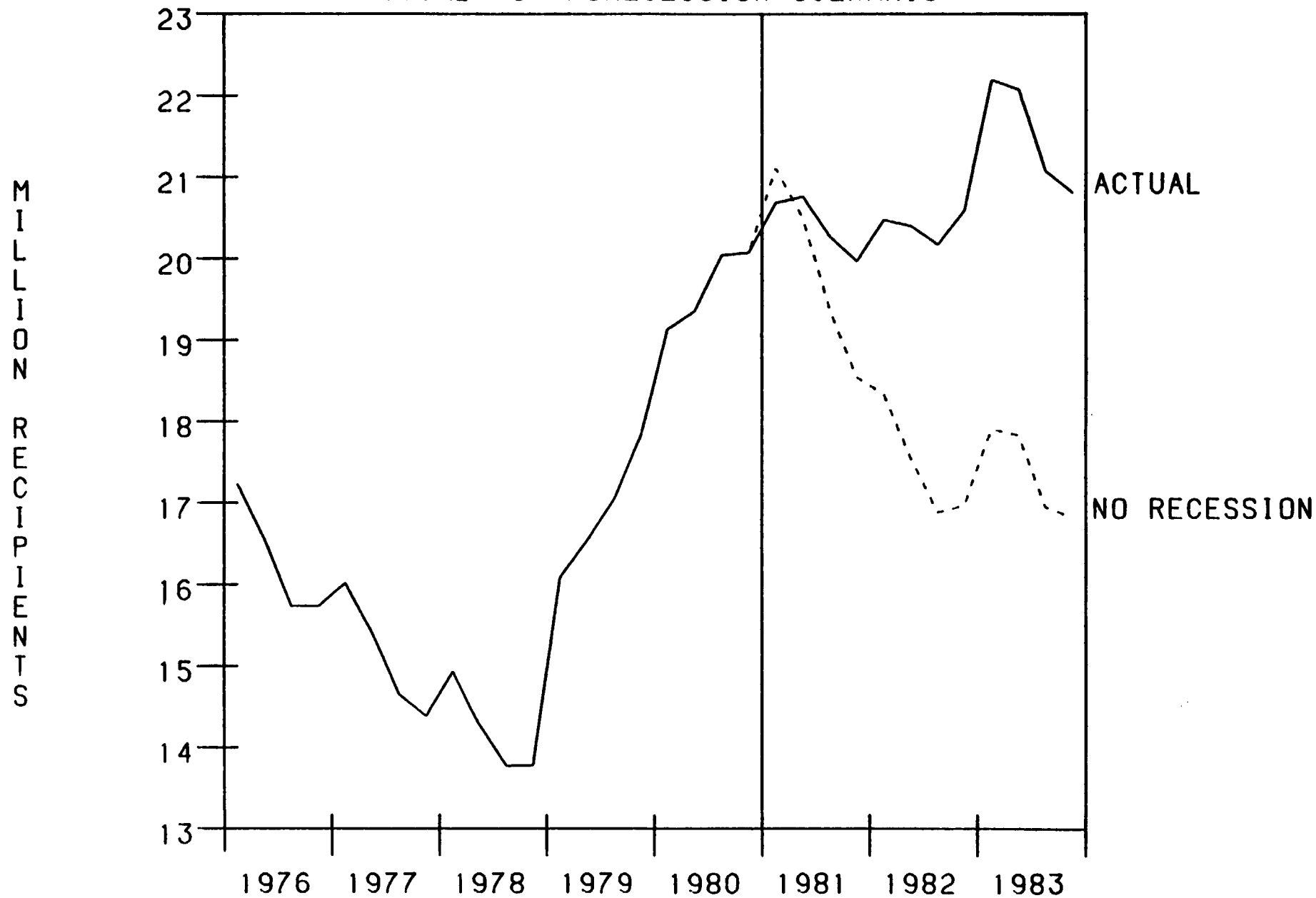
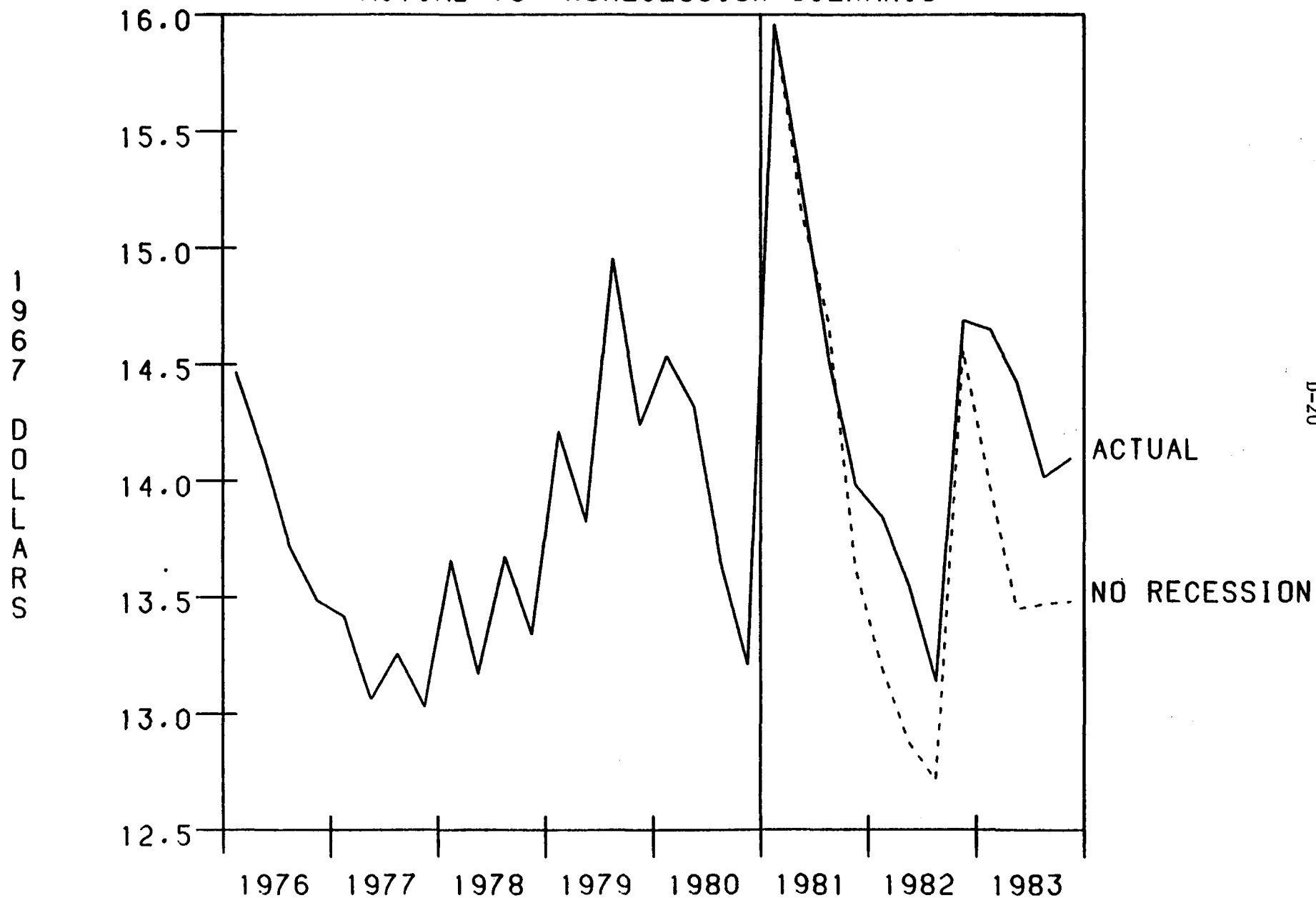


Figure D.2
PRIMARY MODEL
AVERAGE FOODSTAMP BENEFIT IN U.S. (1967\$)
ACTUAL VS. NO RECESSION SCENARIO



APPENDIX E

ANALYSIS OF THE LONGITUDINAL FOOD STAMP CASE RECORD DATA

Overview

The evaluation of the effects of the 1981 and 1982 legislative changes in the Food Stamp Program includes analysis of a nationally representative sample of cases tracked over a three year period. In order to allow inferences about the impact of the major changes, the sample was drawn from cases active at any time between October 1, 1980 (one year before the implementation of the first changes) and December 31, 1983. The survey was conducted by Market Facts, Inc. under subcontract to The Urban Institute.

Data from actual program records were abstracted to develop a longitudinal file describing all Food Stamp Program status changes, benefit levels and other actions for each sampled case. In addition to case record data, information was also collected on (1) local program variables including when and how various changes were implemented in each office in the sample; and (2) the local unemployment rate in sampled communities. This Appendix describes the methods used for sampling, collecting, and editing these data and the types of preliminary analysis done to date. The sample design is presented, followed by a summary of the case record data and abstraction procedures. Next, the local program information is described. Finally, a brief discussion of the editing and preliminary descriptive analysis follows.

Sampling Design

The target population for this analysis is all food stamp cases active at any time between October 1, 1980 and December 31, 1983, in the forty-eight coterminous states and the District of Columbia. The two-stage stratified

sampling framework was designed to generate a sample representative of the target population such that inferences about the population could be drawn from sample information. In the first stage local food stamp offices were selected and the second stage consisted of drawing cases in each sampled office.

The sample design consisted of selecting sixty local food stamp offices that would together provide a representative sample of all food stamp cases. The original design however, was modified as a result of a desire to coordinate this survey with another food stamp study of expedited services conducted by SRA Technologies, which also included abstracting data from case records in sixty sites. In order to minimize the total number of local offices participating in the two studies, the sample design was revised to allow for 38 overlapping sites (i.e., 38 sites were to be included in both studies, and 22 would be in The Urban Institute's evaluation only).

In the final sample design 60 sites were chosen from a total of 3577 local offices; the probability of site selection varied with caseload size and geographic location. Table E.1 shows the sampled offices by region and caseload size. Next, a sampling rule was developed that would result in any case having equal probability of selection over the entire sample of qualified cases--cases active between October 1, 1980 and December 31, 1983. Within each office the qualified caseload was estimated and the sampling rule applied to determine the number of cases to be abstracted from that office. The required number was randomly selected from the total qualified group and the information abstracted.¹

1. A final modification became necessary because 18 of the 60 offices had purged cases that had been closed with no action for three years. The sample frames for these 18 offices reflected the earliest date for which all closed cases could be reviewed.

Table E.1
 SAMPLED OFFICES BY REGION AND CASELOAD SIZE

Office Size	Region			
	East	Midwest	South	West
Largest (5011-62,932 cases)	7	7	5	3
Larger (2714-5004 cases)	3	2	3	2
Large (1903-2710 cases)	1	1	5	2
Medium (661-1896 cases)	2	3	8	2
Small (< 660 cases)		2*	1	1

*Because of the small percentage of the total caseload represented by the East-Small cell (0.3%) this cell was combined with Midwest-Small.

Table E.2 lists the final number of cases abstracted in each office. The sites that overlap with the SRA study are noted as are those which had time frames other than October 1, 1980 - December 31, 1983.

Data Abstraction

Data abstraction consisted of recording information on each selected case at baseline and after any changes that occurred between baseline and December 31, 1983. Baseline was defined as the application or recertification date closest in time to October 1, 1980. The following types of items at baseline and after any changes were recorded:

- o Case status (openings and closings)
- o Individual and household description (including age)
- o Level and certification period of benefits
- o Allowable expenses and deductions
- o Employment status
- o Earnings, assets and other income
- o Participation in other programs

This information was recorded on three types of abstraction forms:

- o Initial Form (for baseline information)
- o Monthly Report Form (for recording the months in which a monthly report was filed)
- o Update Form (for changes in status, benefits or conditions; new information; regular recertifications; monthly report with changes)

Market Facts, Inc., processed the forms for verification, editing, and data processing. The data were delivered in tape form to The Urban Institute for further processing and analysis.

Table E.2

FINAL SAMPLE OF CASES ABSTRACTED BY LOCAL OFFICE

Office Number	Location	Number of Cases Sampled
01	*Perry County, Alabama	76
02	*DeKalb County, Alabama	101
03	*Mississippi County, Arkansas ⁴	49
04	*Solano County, California	205
05	Los Angeles County (El Monte), CA	103
06	Alameda County (Hayward), CA	169
07	*Arapahoe County, Colorado	226
08	Fremont County, Colorado	84
09	*San Miguel County, Colorado	40
10	Middletown, Connecticut	122
11	*Pasco County, Florida ³	102
12	Dade County (SW 1st. St., Miami) FL	82
13	Dade County (W. Flagler, Miami), FL	62
14	Hillsborough County, Florida	88
15	Pottawatomie County, Oklahoma	82
16	*Craig County, Oklahoma	137
17	Roanoke, Virginia	102
18	*Ford County, Illinois ¹	99
19	Cook County (W. Oak St.), Illinois	48
20	Cook County (N. Milwaukee Ave.), Ill	197
21	*Polk County, Iowa	201
22	*Clark County, Kentucky ³	73
23	*Lawrence County, Kentucky	72
24	*Franklin Parish, Louisiana	52
25	Fall River, Massachusetts	89
26	*LaPeer County, Michigan ¹	119
27	Wayne County (Harper St., Detroit) MI	86
28	Wayne County (Inkster), MI	60
29	Saginaw County, MI	177
30	*St. Louis, Missouri ¹	288
31	Missoula County, Montana ³	113
32	Las Vegas, Nevada ³	284
33	*Bergen County, New Jersey	178
34	*Middlesex County, New Jersey ²	58
35	*Monmouth County, New Jersey	127
36	Oneida County, New York	93
37	*New York City (E. 34th St.) NY	61
38	*New York City (Hinsdale-Brklyn), NY	87
39	Monroe County, New York	38

Table E.2 (continued)

Office Number	Location	Number of Cases Sampled
40	New York City (Broadway), NY	146
41	*Halifax County, North Carolina	158
42	*Cherokee County, North Carolina	55
43	*Martin County, North Carolina	104
44	*LaMoure County, North Dakota ¹	27
45	*Allen County, Ohio	115
46	Mecklenburg County, North Carolina	171
47	Lucas County, Ohio	248
48	*Susquehanna County, Pennsylvania	72
49	Philadelphia (Federal Dist.), PA	95
50	*Saluda County, South Carolina	89
51	Williamsburg County, South Carolina	93
52	*Uankton, South Dakota ¹	107
53	*Dallas (Ross Ave.), Texas ⁵	202
54	*Mission, Texas ⁵	64
55	*Greenville, Texas ⁵	69
56	*Spokane (S. Arthur), Washington	94
57	*Spokane (N. Washington), Washington	85
58	*McDowell County, West Virginia ¹	43
59	*Fond Dulac County, Wisconsin	137
60	*Racine County, Wisconsin ⁶	30
Total		6,671

*These 38 sites were also included in the SRA study of expedited services in the Food Stamp Program.

1. The sample frame for these offices was 1/1/81-12/31/83
2. The sample frame for this office was 5/1/81-12/31/83
3. The sample frame for these offices was 7/1/81-12/31/83
4. The sample frame for this office was 9/1/81-12/31/83
5. The sample frame for these offices was 10/1/81-12/31/83
6. The sample frame for this office was 10/1/82-12/31/84

Local Program Information

In order to examine fully the effects of the federal legislative changes in the Food Stamp Program, information was collected from each of the 60 sample offices about (1) when the changes were implemented (i.e., in which months); and (2) how the changes were implemented (e.g., all cases affected at once, or cases reviewed at next recertification).

The following legislative changes were addressed:

- o Gross income limit of 130 percent of the poverty line for nonaged and nondisabled households;
- o Reduction of the earnings deduction from 20 percent to 18 percent;
- o Proration of initial benefits from the day of application;
- o New definition of a food stamp household regarding adult children and siblings;
- o Net income limit of 100 percent of the poverty level for nonaged and nondisabled households;
- o Monthly reporting;
- o Expansion of work requirements (e.g., job search, workfare);
- o Restriction on the use of standard utility allowances.

Since many food stamp recipients also participate in other public programs, the information from local office administrators also addressed major changes in AFDC (e.g., monthly reporting, WIN, Workfare), and General Assistance that might have occurred during the study period. These program implementation variables were coded and added to the case records file for inclusion in the analysis of the effect of legislative changes.

Preliminary Analysis

The case records file prepared by Market Facts underwent a series of elaborate consistency checks and data verification procedures prior to analysis. As is discussed below, this was necessitated by the fact that over

the course of the abstraction period a particular case could undergo many changes--events such as household size changes, changes in earnings or AFDC income, and changes in shelter costs or work expenses--in addition to scheduled recertifications or case openings, closings, and reapplications. The high level of activity and the importance of ordering events chronologically imposed the need for a highly structured verification procedure.

The file consisted of 6671 cases, of these, 551 cases had various inconsistencies such that they could not be processed. The single most common type of problem encountered was that the dates associated with key events were inconsistent (or missing) and simple rules of logic did not result in reasonable imputations. It is expected that many of these can be corrected using manual correction procedures as editing continues on the data file. The sample on which preliminary analysis was based totaled 6110 cases.

A few general statements about the characteristics of the case records are suggestive of the complications involved in abstracting these data. First, 90,390 valid monthly observations were generated out of 238,290 potential monthly observations (39-month period of analysis times 6110 cases = 238,290). Hence, on average, a case was active 38 percent of the time, or 15 months.

There was considerable activity across the records in the sample. As mentioned previously, update forms were recorded for any changes in status, benefits, household characteristics, etc. Over 28,000 update sets were recorded and the distribution of the number of updates across the total number of households is shown in Table E.3. Closings, reapplications, and recertifications are types of updates of particular interest. Distributions are shown in Table E.4 through Table E.6.

Table E.3

DISTRIBUTION OF REPORTED UPDATE SETS PER CASE

Number of Update Sets	Number of Cases
0	970
1	1092
2-5	2659
6-10	1275
11-20	551
21-30	56
31+	7
	<u>6610</u>

Table E.4

DISTRIBUTION OF REPORTED CLOSINGS PER CASE

Number of Closings	Number of Cases
0	2035
1	3507
2	814
3-5	249
6-10	5
	<u>6610</u>

Table E.5

DISTRIBUTION OF REPORTED REAPPLICATIONS PER CASE

Number of Reapplications	Number of Cases
0	4886
1	1276
2	326
3-6	122
	<u>6610</u>

Table E.6

DISTRIBUTION OF REPORTED RECERTIFICATIONS PER CASE

Number of Recertifications	Number of Cases
0	2085
1	1308
2	925
3-5	1583
6-10	654
11-20	52
21+	3
	<u>6610</u>

Descriptive analysis of the data was of interest in its own right and also served as a means of verifying the case records information. Mean values by month were calculated for the benefit amount (AVG-BEN), the month-to-month change in the benefit (AVG-CH), reported gross income (AVG-GRSY), the proportion of cases with earnings reported (EARN-P), the proportion with AFDC income reported (AFDC-P), and the proportion with a member 65 years of age or older present (AGED-P).

Two additional variables are described, the entry rate (ENTRY-RT) and the exit rate (EXIT-RT). The former is defined as the proportion of all active cases that are newly opened this month.¹ Analogously, the exit rate is defined as the proportion of all active cases for which this is the last month in a spell. Note that the exit rate is not measured properly in month 39 because it cannot be observed whether that is a last month for most cases. Separate analyses were conducted for the following subgroups:

- o All active cases;
- o Newly opened cases;
- o Newly closed cases;
- o Cases with earnings;
- o Cases with AFDC income;
- o Cases with an aged member.

In addition, special tabulations were generated for the months around implementation of prorating and the change to a gross income limit of 130 percent of poverty.

1. There is an apparent tendency for the entry rate to be somewhat high in the first few months of the abstraction period. It is not clear whether this is a real effect or due to sampling features. Because the abstraction period was delayed in a few sites, sample sizes in the early months are somewhat reduced.

Average values for selected variables are shown in Tables E.7 through E.12. Each table corresponds to a particular subgroup, as indicated above. The time frame is the 39-month abstraction period.

<u>Month</u>	<u>Date</u>
1	October, 1980
4	January, 1981
16	January, 1982
28	January, 1983
39	December, 1983

The variables for which means are presented include:

(1) Monthly Benefit	AVG-BEN
(2) Month-to-Month Change in Benefit	AVG-CH
(3) Gross Household Income	AVG-GRSY
(4) Proportion of Cases Leaving this Month	Exit-RT
(5) Proportion of Newly Opened Cases this Month	Entry-RT
(6) Proportion of Cases Reporting Earnings	Earn-P
(7) Proportion of Cases Reporting AFDC	AFDC-P
(8) Proportion of Cases with a Member 65 or Older	AGED-P

Table E.7.

MEAN VALUES FOR ALL ACTIVE CASES BY MONTH

MONTH	_TYPE_	_FREQ_	AVG_REN	AVG_CH	AVG_GRSY	EXIT_RT	ENTRY_RT	EARN_P	AGEO_P	AFDC_P
1	0	1476	94.219	.	328.896	0.0481030	0.092818	0.193767	0.205285	0.331978
2	0	1561	93.828	8.8255	328.553	0.0499680	0.099936	0.197950	0.201794	0.335682
3	0	1647	94.500	9.5185	329.194	0.0497875	0.100789	0.202793	0.199757	0.333940
4	0	1796	91.048	17.6825	326.775	0.0534521	0.128619	0.197105	0.197661	0.330178
5	0	1854	94.861	10.9493	332.500	0.0507012	0.083603	0.208738	0.196872	0.336570
6	0	1916	96.529	9.6047	333.702	0.0605428	0.081942	0.204593	0.198852	0.341336
7	0	1949	98.329	9.2808	335.102	0.0590046	0.076963	0.201642	0.194972	0.350436
8	0	1997	99.210	9.3898	331.978	0.0450676	0.082123	0.203305	0.202303	0.359539
9	0	2079	100.748	9.6768	328.852	0.0707071	0.081289	0.208754	0.195767	0.350168
10	0	2150	100.382	10.8887	331.435	0.0655814	0.101395	0.212558	0.196279	0.343256
11	0	2192	100.950	8.9868	334.498	0.0529197	0.083485	0.213047	0.194799	0.341697
12	0	2267	100.035	8.2594	336.028	0.0688134	0.084252	0.217909	0.195412	0.340097
13	0	2303	98.682	7.2796	339.205	0.0712115	0.082935	0.219713	0.194095	0.341294
14	0	2317	99.823	8.3575	341.355	0.0664653	0.077255	0.220112	0.190332	0.336642
15	0	2349	99.267	7.7998	344.348	0.0668370	0.080460	0.223499	0.193274	0.339293
16	0	2361	100.022	8.3182	344.334	0.0626853	0.074121	0.222363	0.190174	0.330368
17	0	2386	101.797	9.0580	342.888	0.0725063	0.069992	0.219614	0.189019	0.328583
18	0	2364	101.729	6.7545	343.896	0.0642978	0.064721	0.211929	0.191624	0.325296
19	0	2353	101.020	5.9834	346.415	0.0726732	0.060348	0.209945	0.192945	0.325967
20	0	2310	100.587	4.9211	350.095	0.0701299	0.056277	0.207359	0.196970	0.331602
21	0	2330	99.473	6.0908	353.746	0.0626609	0.078112	0.207725	0.195708	0.326609
22	0	2393	100.722	9.6598	345.650	0.0689511	0.087756	0.207689	0.191809	0.325115
23	0	2431	101.378	8.8031	349.333	0.0559441	0.083093	0.211847	0.185932	0.334842
24	0	2486	102.251	8.8185	355.895	0.0756235	0.077635	0.213596	0.184232	0.337088
25	0	2511	107.243	12.9661	355.095	0.0649144	0.083234	0.215850	0.178415	0.337316
26	0	2542	109.420	10.6128	355.952	0.0476003	0.077891	0.220692	0.179780	0.336743
27	0	2591	111.587	9.7511	359.494	0.0513315	0.067541	0.227711	0.178310	0.330760
28	0	2666	112.914	10.2851	354.495	0.0547637	0.078395	0.232933	0.171043	0.320705
29	0	2692	114.626	8.4996	355.970	0.0627786	0.063522	0.237370	0.169391	0.324294
30	0	2688	115.043	7.9929	351.401	0.0558036	0.063244	0.230655	0.168899	0.327009
31	0	2669	113.924	4.7408	352.103	0.0636943	0.049082	0.219933	0.174223	0.329337
32	0	2618	113.300	4.7469	356.874	0.0614973	0.045455	0.226891	0.176089	0.337280
33	0	2610	111.811	5.6054	358.677	0.0731801	0.059770	0.228736	0.176245	0.333333
34	0	2592	111.132	6.8906	351.373	0.0582562	0.066744	0.220679	0.180941	0.336806
35	0	2616	109.981	6.5432	356.007	0.0665138	0.068807	0.227064	0.178517	0.338685
36	0	2593	109.225	6.4292	362.749	0.0701890	0.060933	0.227921	0.177786	0.346703
37	0	2571	111.001	7.2730	367.165	0.0606768	0.062233	0.222482	0.180863	0.349669
38	0	2587	110.278	6.7630	363.384	0.0514109	0.066873	0.227677	0.180131	0.345187
39	0	2577	110.700	6.7413	364.312	0.0190144	0.050446	0.227396	0.182383	0.343811

Sample Size = 90390

Table E.8

MEAN VALUES FOR ALL NEWLY OPENED CASES BY MONTH								
MONTH	_TYPE_	_FREQ_	AVG_BEN	AVG_GRSY	EXIT_RT	EARN_P	AGED_P	AFDC_P
1	0	138	83.095	266.290	0.108696	0.224638	0.079710	0.159420
2	0	156	86.186	293.617	0.051282	0.230769	0.115385	0.269231
3	0	167	95.916	288.811	0.083832	0.275449	0.113772	0.269461
4	0	233	93.922	296.240	0.064378	0.214592	0.133047	0.240343
5	0	155	108.987	300.935	0.103226	0.290323	0.077419	0.225806
6	0	157	102.554	280.841	0.108280	0.203822	0.114650	0.235669
7	0	153	111.573	285.862	0.143791	0.267974	0.065359	0.267974
8	0	165	106.085	302.376	0.054545	0.254545	0.169697	0.266667
9	0	171	114.320	258.071	0.105263	0.304094	0.064327	0.157895
10	0	218	113.193	285.318	0.155963	0.261468	0.110092	0.215596
11	0	183	117.814	294.694	0.092896	0.311475	0.071038	0.218579
12	0	192	111.984	291.637	0.125000	0.317708	0.093750	0.223958
13	0	194	89.592	293.840	0.082474	0.298969	0.077320	0.201031
14	0	179	99.425	296.237	0.106145	0.290503	0.055866	0.162011
15	0	189	84.286	315.222	0.095238	0.370370	0.095238	0.206349
16	0	175	91.097	293.649	0.051429	0.348571	0.040000	0.160000
17	0	167	102.784	295.407	0.131737	0.269461	0.077844	0.161677
18	0	153	82.235	266.119	0.065359	0.222222	0.091503	0.137255
19	0	143	90.711	281.790	0.090909	0.251748	0.069930	0.209790
20	0	131	83.092	296.725	0.099237	0.236641	0.076336	0.213740
21	0	182	78.566	307.352	0.109890	0.280220	0.065934	0.148352
22	0	210	90.214	258.981	0.100000	0.328571	0.071429	0.195238
23	0	203	85.282	272.576	0.073892	0.310345	0.044335	0.231527
24	0	194	103.860	294.139	0.087629	0.268041	0.067010	0.226804
25	0	210	99.225	293.471	0.076190	0.309524	0.047619	0.176190
26	0	198	93.308	302.182	0.045455	0.282828	0.085859	0.186869
27	0	175	100.389	369.509	0.034286	0.325714	0.062857	0.108571
28	0	209	95.196	294.284	0.047847	0.368421	0.043062	0.114833
29	0	171	85.339	320.450	0.029240	0.362573	0.052632	0.134503
30	0	171	107.518	278.159	0.040936	0.321637	0.064327	0.181287
31	0	134	94.626	263.008	0.059701	0.238806	0.104478	0.223881
32	0	119	101.798	300.966	0.092437	0.319328	0.050420	0.235294
33	0	156	93.904	283.282	0.076923	0.269231	0.057692	0.185897
34	0	175	88.468	282.517	0.085714	0.274286	0.085714	0.171429
35	0	181	83.667	351.337	0.027624	0.370166	0.077348	0.220994
36	0	158	91.342	364.500	0.025316	0.341772	0.037975	0.189873
37	0	161	94.056	322.208	0.080745	0.229814	0.124224	0.223602
38	0	173	91.671	270.936	0.063584	0.283237	0.075145	0.202312
39	0	130	99.485	320.815	0.007692	0.376923	0.061538	0.130769

Sample Size = 6729

Table E.9

MEAN VALUE OF CHANGE IN BENEFITS FOR ALL NEWLY CLOSED CASES BY MONTH

MONTH	_TYPE_	_FREQ_	AVG_CH
2	0	71	-100.55
3	0	80	-92.38
4	0	82	-90.71
5	0	96	-82.66
6	0	94	-95.49
7	0	117	-97.72
8	0	116	-105.33
9	0	90	-105.37
10	0	147	-118.06
11	0	141	-100.96
12	0	118	-110.18
13	0	157	-105.06
14	0	164	-100.12
15	0	156	-104.81
16	0	159	-101.27
17	0	149	-103.41
18	0	174	-104.47
19	0	155	-111.36
20	0	171	-97.13
21	0	164	-101.69
22	0	146	-92.23
23	0	167	-97.37
24	0	137	-102.00
25	0	189	-95.54
26	0	164	-108.20
27	0	122	-112.62
28	0	134	-115.79
29	0	147	-108.53
30	0	170	-120.29
31	0	152	-120.01
32	0	170	-117.01
33	0	165	-119.03
34	0	193	-111.62
35	0	154	-109.88
36	0	181	-116.49
37	0	188	-92.49
38	0	157	-112.17
39	0	140	-122.93

Sample Size = 5477

Table E.10

MEAN VALUES FOR ALL EARNERS BY MONTH									
MONTH	_TYPE_	_FREQ_	AVG_BEN	AVG_CH	AVG_GRSY	EXIT_RT	ENTRY_RT	AGED_P	AFDC_P
1	0	288	96.678	.	531.175	0.059028	0.107639	0.0590278	0.218750
2	0	310	96.129	9.7231	523.118	0.077419	0.116129	0.0709677	0.248387
3	0	335	94.817	9.7515	530.097	0.080597	0.137313	0.0746269	0.253731
4	0	355	104.446	20.9124	523.443	0.078056	0.140845	0.0732394	0.242254
5	0	388	111.504	14.3282	518.995	0.087629	0.115979	0.0747423	0.244845
6	0	392	113.457	7.4322	522.561	0.084184	0.081633	0.0739796	0.252551
7	0	393	114.226	14.4758	518.618	0.091603	0.104326	0.0763359	0.251908
8	0	406	113.406	10.0099	515.315	0.064039	0.103448	0.0812808	0.266010
9	0	435	112.917	11.6074	514.385	0.075862	0.119540	0.0735632	0.252874
10	0	458	110.713	9.5624	517.969	0.104803	0.124454	0.0655022	0.233624
11	0	470	113.390	12.3798	526.013	0.082979	0.121277	0.0680851	0.225532
12	0	496	112.660	9.3259	522.894	0.092742	0.122984	0.0665323	0.221774
13	0	509	110.735	8.8313	525.750	0.096267	0.113949	0.0589391	0.220039
14	0	514	111.355	10.5235	525.521	0.103113	0.101167	0.0505837	0.210117
15	0	530	108.373	10.1086	529.412	0.101887	0.132075	0.0584906	0.213208
16	0	530	110.619	11.5771	531.557	0.086792	0.115094	0.0547170	0.196226
17	0	527	115.292	12.5870	523.604	0.085389	0.085389	0.0569260	0.193548
18	0	506	117.349	6.8840	524.848	0.094862	0.067194	0.0612648	0.205534
19	0	497	116.340	4.7931	535.308	0.092555	0.072435	0.0684105	0.225352
20	0	482	111.154	-0.7218	537.621	0.093361	0.064315	0.0809129	0.219917
21	0	487	109.645	7.5000	545.696	0.108830	0.104723	0.0739220	0.209446
22	0	499	112.115	12.3818	536.881	0.096192	0.138277	0.0681363	0.226453
23	0	516	110.645	8.8311	544.603	0.073643	0.122093	0.0620155	0.244186
24	0	532	113.021	10.0301	551.687	0.110902	0.097744	0.0639098	0.227444
25	0	543	120.672	16.7019	548.004	0.082873	0.119705	0.0552486	0.219153
26	0	562	123.380	13.2531	543.475	0.065836	0.099644	0.0516014	0.217082
27	0	592	127.207	12.0610	532.426	0.074324	0.096284	0.0472973	0.202703
28	0	624	131.976	17.7359	507.092	0.073718	0.123397	0.0432692	0.190705
29	0	642	136.255	12.2833	498.790	0.099688	0.096573	0.0420561	0.188474
30	0	627	135.000	11.2290	497.122	0.092504	0.087719	0.0366826	0.185008
31	0	592	132.186	1.7402	514.400	0.089527	0.054054	0.0422297	0.195946
32	0	598	130.128	3.5481	514.039	0.076923	0.063545	0.0418060	0.220736
33	0	601	129.591	5.2651	514.397	0.116473	0.069884	0.0432612	0.216306
34	0	576	128.058	6.5280	506.343	0.085069	0.083333	0.0451389	0.230903
35	0	600	124.125	8.3620	520.835	0.113333	0.111667	0.0466667	0.223333
36	0	595	121.157	6.8305	540.582	0.097479	0.090756	0.0420168	0.226891
37	0	574	127.093	6.8497	553.319	0.085366	0.064460	0.0452962	0.224739
38	0	591	126.764	5.9236	541.836	0.077834	0.082910	0.0406091	0.231810
39	0	589	122.510	8.0427	532.995	0.020374	0.083192	0.0390492	0.217317

Sample Size = 19761

Table E.11

MEAN VALUES FOR ALL AFDC CASES BY MONTH									
MONTH	_TYPE_	_FREQ_	AVG_BEN	AVG_CH	AVG_GRSY	EXIT_RT	ENTRY_RT	EARN_P	AGED_P
1	0	492	111.004	.	386.907	0.0304878	0.0447154	0.128049	0.0467480
2	0	527	113.095	9.6750	383.863	0.0436433	0.0796964	0.146110	0.0417457
3	0	552	112.842	8.7418	388.398	0.0380435	0.0815217	0.153986	0.0398551
4	0	597	122.840	19.5295	382.247	0.0251256	0.0938023	0.144054	0.0368509
5	0	628	125.410	9.1923	387.324	0.0270701	0.0557325	0.151274	0.0350318
6	0	660	128.460	9.7966	387.231	0.0303030	0.0560606	0.150000	0.0348485
7	0	691	133.461	9.6378	390.312	0.0289436	0.0593343	0.143271	0.0376266
8	0	728	134.340	9.2999	381.237	0.0274725	0.0604396	0.148352	0.0343407
9	0	736	135.536	5.4454	375.986	0.0597826	0.0366848	0.149457	0.0380435
10	0	744	136.602	9.6535	371.896	0.0389785	0.0631720	0.143817	0.0349462
11	0	754	135.654	5.7614	377.885	0.0424403	0.0530504	0.140584	0.0318302
12	0	778	135.853	6.6593	371.063	0.0437018	0.0552699	0.141388	0.0334190
13	0	790	136.158	6.1354	374.105	0.0443038	0.0493671	0.141772	0.0329114
14	0	785	137.342	5.2949	378.940	0.0420382	0.0369427	0.137580	0.0305732
15	0	803	138.975	6.2349	376.297	0.0672478	0.0485679	0.140722	0.0336239
16	0	784	141.247	5.4685	375.324	0.0408163	0.0357143	0.132653	0.0306122
17	0	786	141.413	5.1317	372.865	0.0521628	0.0343511	0.129771	0.0292621
18	0	772	142.406	3.9454	379.856	0.0453368	0.0272021	0.134715	0.0323834
19	0	771	141.885	4.5791	387.187	0.0402075	0.0389105	0.145266	0.0311284
20	0	770	141.943	4.4373	387.487	0.0480519	0.0363636	0.137662	0.0324675
21	0	764	141.580	3.5500	388.823	0.0366492	0.0353403	0.133508	0.0366492
22	0	781	141.333	6.5180	388.886	0.0268886	0.0524968	0.144686	0.0345711
23	0	817	139.736	5.8315	392.475	0.0281518	0.0575275	0.154223	0.0342717
24	0	841	141.899	8.5591	396.222	0.0428062	0.0523187	0.143876	0.0356718
25	0	850	145.959	9.9787	395.763	0.0388235	0.0435294	0.140000	0.0364706
26	0	860	150.040	8.4346	395.353	0.0232558	0.0430233	0.141860	0.0348837
27	0	863	151.852	4.9393	395.756	0.0336037	0.0220162	0.139050	0.0347625
28	0	861	154.725	5.8042	389.629	0.0267131	0.0278746	0.138211	0.0313589
29	0	877	155.108	3.4667	387.536	0.0399088	0.0262258	0.137970	0.0319270
30	0	882	157.571	6.5770	391.606	0.0374150	0.0351474	0.131519	0.0317460
31	0	885	157.528	4.9124	389.520	0.0361582	0.0338983	0.131073	0.0350282
32	0	890	156.761	3.3601	393.406	0.0382022	0.0314607	0.148315	0.0348315
33	0	878	155.116	4.4741	396.458	0.0410023	0.0330296	0.148064	0.0318907
34	0	883	155.924	5.0481	388.723	0.0430351	0.0339751	0.150623	0.0294451
35	0	895	154.315	5.1232	393.357	0.0324022	0.0446927	0.149721	0.0324022
36	0	910	153.334	4.2180	394.664	0.0395604	0.0329670	0.148352	0.0318681
37	0	907	153.561	5.1217	397.462	0.0474090	0.0396913	0.142227	0.0330761
38	0	901	152.094	4.2508	402.380	0.0355161	0.0388457	0.152053	0.0344062
39	0	895	153.554	5.9368	400.637	0.0100559	0.0189944	0.143017	0.0324022

Sample Size = 30588

Table E.12.

MEAN VALUES FOR ALL AGED CASES BY MONTH									
MONTH	_TYPE_	_FREQ_	AVG_BEN	AVG_CH	AVG_GRSY	EXIT_RT	ENTRY_RT	EARN_P	AFDC_P
1	0	303	45.6700	.	297.765	0.0099010	0.0363036	0.0561056	0.0759076
2	0	316	43.8984	2.47302	306.875	0.0158228	0.0569620	0.0696203	0.0696203
3	0	330	43.7264	2.60790	312.429	0.0121212	0.0575758	0.0757576	0.0666667
4	0	356	46.7437	7.84507	313.419	0.0112360	0.0870787	0.0730337	0.0617978
5	0	367	48.9562	2.64384	316.461	0.0136240	0.0326975	0.0790191	0.0599455
6	0	383	49.2808	3.02362	316.963	0.0339426	0.0469974	0.0757180	0.0600522
7	0	382	50.3868	1.89211	317.469	0.0157068	0.0261780	0.0785340	0.0680628
8	0	406	50.2500	3.32178	319.337	0.0221675	0.0689655	0.0812808	0.0615764
9	0	408	49.9337	1.29064	324.025	0.0294118	0.0269608	0.0784314	0.0686275
10	0	424	48.4455	1.48104	330.333	0.0235849	0.0566038	0.0707547	0.0613208
11	0	429	48.2717	0.61827	336.285	0.0093240	0.0303030	0.0745921	0.0559441
12	0	445	47.9616	1.22348	339.691	0.0314607	0.0404494	0.0741573	0.0584270
13	0	449	48.0805	1.68904	337.883	0.0445434	0.0334076	0.0668151	0.0579065
14	0	443	46.8141	0.19501	336.154	0.0158014	0.0225734	0.0586907	0.0541761
15	0	456	48.5727	3.47577	339.548	0.0241228	0.0394737	0.0679825	0.0592105
16	0	451	48.3497	1.27840	341.523	0.0266075	0.0155211	0.0643016	0.0532151
17	0	453	49.3459	2.62084	342.572	0.0331126	0.0286976	0.0662252	0.0507726
18	0	456	49.6689	1.81678	353.857	0.0241228	0.0307018	0.0679825	0.0548246
19	0	456	47.7555	0.47461	356.372	0.0263158	0.0219298	0.0745614	0.0526316
20	0	458	47.0022	0.35165	357.827	0.0349345	0.0218341	0.0851528	0.0545852
21	0	459	48.6031	1.93202	357.982	0.0305011	0.0261438	0.0784314	0.0610022
22	0	462	47.8649	1.44323	356.182	0.0411255	0.0324675	0.0735931	0.0584416
23	0	454	47.7832	-0.14856	360.350	0.0176211	0.0198238	0.0704846	0.0616740
24	0	461	46.1485	-0.39083	364.956	0.0477223	0.0281996	0.0737527	0.0650759
25	0	451	49.0268	3.14286	364.965	0.0288248	0.0221729	0.0665188	0.0687361
26	0	460	49.6346	2.35746	363.874	0.0152174	0.0369565	0.0630435	0.0652174
27	0	465	49.8160	1.83983	367.796	0.0322581	0.0236559	0.0602151	0.0645161
28	0	459	49.7917	2.21538	358.692	0.0174292	0.0196078	0.0588235	0.0588235
29	0	460	51.5175	2.65351	360.342	0.0260870	0.0195652	0.0586957	0.0608696
30	0	458	50.5793	0.68282	362.361	0.0131004	0.0240175	0.0502183	0.0611354
31	0	471	50.5441	1.79570	363.503	0.0233546	0.0297240	0.0530786	0.0658174
32	0	467	50.7223	0.73319	361.959	0.0235546	0.0128480	0.0535332	0.0663812
33	0	466	49.4630	0.75435	361.922	0.0236052	0.0193133	0.0557940	0.0600858
34	0	472	48.9936	1.83726	364.904	0.0338983	0.0317797	0.0550847	0.0550847
35	0	473	48.3897	0.92719	367.530	0.0401691	0.0295983	0.0591966	0.0613108
36	0	466	47.9067	0.42826	364.283	0.0493562	0.0128755	0.0536481	0.0622318
37	0	469	47.9226	1.54957	368.687	0.0277186	0.0426439	0.0554371	0.0639659
38	0	471	48.8627	1.53219	366.889	0.0148620	0.0276008	0.0509554	0.0658174
39	0	475	48.5957	1.01279	368.877	0.0126316	0.0168421	0.0484211	0.0610526

Sample Size = 16990

APPENDIX F

ANALYSIS OF THE INTERACTIONS BETWEEN THE FOOD STAMP PROGRAM AND OTHER TRANSFER PROGRAMS

The individual effects of legislative changes in the major income support programs were estimated using The Urban Institute's microsimulation model, the Transfer Income Model or TRIM2. TRIM2 simulates the detailed rules of the major income transfer programs (AFDC, SSI, and Food Stamps). The program rules are applied to a data base which includes the demographic and income characteristics of a sample of households representative of the entire United States. Typically, the Current Population Survey serves this purpose. TRIM2 can be used to simulate actual (historic) program rules, or alternative (counterfactual) program rules. Thus, the effects of counterfactual provisions on program costs or caseloads or on the incomes of populations served by these programs can be measured against historic outcomes. The effects of the interactions between programs are captured since these are built into the TRIM2 model.

There were significant legislative changes in all of the major income support programs during the 1981-1983 period. Tables F.1 through F.5 summarize the significant federal legislative changes in AFDC, SSI, Social Security, Food Stamps, and Unemployment Insurance, respectively. In this task the effects of the legislative changes in each of these programs on food stamp caseload and benefits were measured. In general, the pre-OBRA rules in these programs were used as counterfactual parameters in TRIM2, and these outcomes were compared to the historic post-OBRA simulation results.

The March 1984 Current Population Survey, representative of 1983 family income circumstances, was used as the initial data base. Thus, the estimates

Table F.1

SUMMARY OF SIGNIFICANT FEDERAL LEGISLATIVE CHANGES IN AID TO FAMILIES WITH DEPENDENT CHILDREN:
JANUARY 1981 THROUGH DECEMBER 1983

Provision	Prior Law	Current Law, 1983	Legislation
Eligibility tests:			
Gross income	none	150% of State need standard ¹	1981 OBRA
Net income	100% state payment standard	at least \$10 below state payment standard	1981 OBRA
Deductions from gross income:			
\$30 and 1/3 earned income disregard	applied before other deductions	applied last; ² only available for 4 months ²	1981 OBRA
work expenses	no cap	standard \$75 deduction for full-time work ³	1981 OBRA
child care	no cap	capped at \$160 per child for full-time work	1981 OBRA
Other income:			
lump sum payments	could cause loss of eligibility for 1 month	lump sum amount/family's need amount = number months of lost eligibility	1981 OBRA
stepparent income	not considered in AFDC benefit determination unless children adopted	a portion of stepparent's income is considered available to the AFDC assistance unit	1981 OBRA
Resources limit:	up to \$2,000/person in some states; home and auto may be counted	\$1,000/household maximum, home and auto excluded	1981 OBRA
Benefit:	determined prospectively; rounded to closest \$1	determined retrospectively; rounded to lower \$1; prorated in first month	1981 OBRA 1982 TEFRA
Reporting requirements:	monthly reporting not required	families must report monthly unless state obtains waiver	1981 OBRA
Eligibility of special groups:			
strikers	eligible	not eligible for payment if caretaker relative on strike on last day of month	1981 OBRA
dependent children	eligible through age 20 if attending school	eligible through age 18 if in high school	1981 OBRA
pregnant women	eligible	eligible in 6th-9th months	1981 OBRA
family with unemployed parent	eligible if father unemployed	eligible if principal wage earner unemployed	1981 OBRA

1. Increased to 185% by the Deficit Reduction Act of 1984.

2. The Deficit Reduction Act of 1984 made a \$30 disregard available for 8 months after the "\$30 and 1/3" expires.

3. The Deficit Reduction Act of 1984 established the \$75 standard for part-time as well as full-time workers.

SUMMARY OF SIGNIFICANT FEDERAL LEGISLATIVE CHANGES IN SOCIAL SECURITY:
JANUARY 1981 THROUGH DECEMBER 1983

Provision	Prior Law	Current Law	Legislation
Minimum benefit	Benefits based on the higher of an individual's own PIA or a minimum PIA	eliminated for new beneficiaries effective Nov. 1981 and for current beneficiaries effective March 82; restored for workers who attain 62 or die before 1982	1981 OBRA 1981 Social Security Amendments
Survivor benefits for students	benefits available through age 22	benefits for students 18-22 phased out, except for secondary students under 19	1981 OBRA
Benefits for widows <60	eliminated when youngest child turns 18	eliminated when youngest child turns 16	1981 OBRA
Initial benefit	benefit may be paid in first month of partial eligibility	delay benefit until first full month of eligibility	1981 OBRA
Rounding of benefits	to next higher 10¢	to lower \$1	1981 OBRA
Cost of living increases	3.5% increase due July 1983	COLA delayed to January 1984	1983 Social Security Amendments
Taxation of benefits	Social Security benefits not taxable	taxation of up to $\frac{1}{2}$ of benefits in households where AGI + $\frac{1}{2}$ Social Security exceeds \$25,000 for an individual, \$32,000 for a couple (effective for 1984 tax year)	1983 Social Security Amendments

Table F.3

SUMMARY OF SIGNIFICANT FEDERAL LEGISLATIVE CHANGES IN SUPPLEMENTAL SECURITY INCOME:
JANUARY 1981 THROUGH DECEMBER 1983

Provision	Prior Law	Current Law	Legislation
Monthly benefit	determined prospectively; rounded to nearest \$1	determined retrospectively; initial benefit prorated to application date; benefit rounded down to lower \$1; Social Security benefits not examined retrospectively in first months after a COLA to eliminate windfall	1981 OBRA 1982 TEFRA
Income deductions home energy assistance	not deductible	deductible	1982 TEFRA
in-kind assistance from non-profit organizations	not deductible	deductible	1982 TEFRA
Maximum benefit	increased on same schedule as Social Security, by amount of Social Security COLA	subject to Social Security 6 month COLA delay from July 1983 to January 1984; benefits increased \$20/month for individuals and \$30/month for couples in July 1983	1983 Social Security Amendments
Eligibility of homeless persons	not eligible	eligible for up to 3 months each year if resident of public emergency shelter	1983 Social Security Amendments
State "pass through" of federal COLA	states must either (a) provide at least the level of supplementation to each category of recipient provided in December 1976; or (b) maintain supplementation expenditures at the level of the prior year	state using method (a) must maintain supplementation amounts in effect in March 1983, and in July 1983 must "pass through" at least a 3.5% increase (rather than full federal increase)	1983 Social Security Amendments

Table F.4

SUMMARY OF SIGNIFICANT FEDERAL LEGISLATIVE CHANGES IN UNEMPLOYMENT INSURANCE:
JANUARY 1981 THROUGH DECEMBER 1983

Provision	Prior Law	Current Law	Legislation
Triggering of extended benefits			
computation of insured unemployment rate	ratio of average number of insured unemployed persons in last 13 weeks to average number in covered employment in the state	computation excludes current EB recipients from "insured unemployed"	
national trigger	available in all states when national insured unemployment rate averages 4.5%	discontinued	1981 OBRA
state triggers	available in a state if (a) its 13 week IUR is at least 4% during the same period and is 20% higher than in the prior 2 years; (b) at state option, when the state IUR is at least 5%	available in a state if (a) its IUR is at least 5% and is 20% higher than in the prior 2 years; (b) at state option, when the state IUR is at least 6%	1981 OBRA
Interest on federal loans to state UI programs	not charged	interest of up to 10% charged on loans made to states after April 1, 1982; states with high unemployment may defer interest; states may qualify for deferred interest if steps taken to improve program solvency	1981 OBRA 1982 TEFRA Social Security Amendments of 1983
Trade Adjustment Assistance (TAA)	available concurrently with regular UI	available only when regular UI exhausted	1981 OBRA
Unemployment for Ex-Service Members (UCX)	not restricted based on type of discharge, opportunity for re-enlistment or length of service; ex-service members can receive benefits for 26 weeks	eliminated for individuals who could have re-enlisted, or who had a less than honorable discharge; restored for honorably discharged veterans who completed their first full term of service; they can obtain up to 13 weeks of benefits based on military employment	1981 OBRA Miscellaneous Revenue Act of 1982
Federal Supplemental Compensation	"third tier" of benefits available during 72-73 and 75-77 recessions brought maximum UI duration to 52 weeks in 72-73, 65 weeks in 75-77	authorized for September 1982 through March 1983, with 6-10 FSC weeks; FSC weeks increased to 8-16; FSC extended through September 1983 at 8-14 weeks, 6-10 if had previously received FSC, for maximum UI duration of 65 weeks; FSC extended through March 1985 at 8-14 weeks	1982 TEFRA 1982 Surface Transportation Assistance Act 1983 Social Security Amendments Federal Supplemental Compensation Amendments
Taxation of UI benefits	taxable if income > \$20,000 for an individual, > \$25,000 for a joint return	taxable if income > \$12,000 for an individual, > \$18,000 for a joint return	1982 TEFRA

Table F.5
SUMMARY OF SIGNIFICANT FEDERAL LEGISLATIVE CHANGES IN THE FOOD STAMP PROGRAM:
JANUARY 1981 THROUGH DECEMBER 1983

Provision	Prior Law	December 1983 Law	Legislation
Eligibility test for Non-elderly/disabled household	net income 100% of poverty	gross income 130% of poverty; and net income 100% of poverty	1981 OBRA; 1982 Food Stamp Amendments
Deductions from income: Standard deduction	updated each January; rounded to nearest \$5	update postponed from January 1982 to October 1983; updated each October, rounded to lower \$1	1981 OBRA and 1982 Food Stamp Amendments
Dependent care/excess shelter deduction for non-elderly/disabled	subject to cap updated each January; cap rounded to nearest \$5	cap update postponed from January 1982 to October 1983; updated each October; cap rounded to lower \$1	1981 OBRA and 1982 Food Stamp Amendments
Separate dependent care deduction	to be effective October 1981	repealed prior to implementation	1981 OBRA
Earned income	20% of earned income deductible	18% deductible	1981 OBRA
Excess medical costs of elderly/disabled	monthly costs over \$35; to be costs over \$25 as of October 1981	monthly costs over \$35 (change to \$25 repealed prior to implementation)	1981 OBRA
Maximum Allotment	updated each January based on projected cost of Thrifty Food Plan; rounded to lower \$1	update postponed from January 1982 to October 1982; updated each October based on 99% of cost of Thrifty Food Plan*	1981 OBRA; 1981 and 1982 Food Stamp Amendments
Initial benefits	full monthly benefit	prorated to application date; no benefit <\$10	1981 OBRA; 1982
Accounting and reporting period for eligibility	Calculated prospectively; rounded to nearest \$1	Calculated retrospectively; rounded to lower \$1; earners and potential earners must report monthly (mandatory implementation delayed until January 1984 under subsequent legislation)	1981 OBRA; 1982 Food Stamp Amendments
Eligibility of special groups:			
boarders	eligible	ineligible	1981 OBRA
strikers	eligible	eligible only if eligible immediately prior to strike	1981 OBRA
children living with non-elderly/non-disabled parents	may file separately	must file as one household	1981 OBRA
non-elderly/non-disabled siblings	may file separately	must file as one household	1982 Food Stamp Amendments
college students	eligible if head of household or spouse of head, or participant in federal work/study program, WIN, or part-time work (at least 20 hours per week)	eligible only if working part-time (at least 20 hours per week); participating in federal work/study; responsible for a child <6; or if on AFDC	1982 Food Stamp Amendments

*Public Law 98-473 returned the basis for adjustment to 100 percent of the cost of the Thrifty Food plan effective November 1984.

represent the program effects in 1983, holding constant other economic circumstances of families. In addition, since the microsimulation model cannot capture any behavioral effects of legislative changes, the estimates represent the total effect in the absence of any household behavioral change.

The following six simulations were produced:

- 1) Pre-OBRA rules for AFDC, SSI, Social Security, and Food Stamps;
- 2) Post-OBRA rules for AFDC, combined with pre-OBRA rules for SSI, Social Security, and food stamps;
- 3) Post-OBRA rules for AFDC and SSI, combined with pre-OBRA rules in Social Security and food stamps;
- 4) Post-OBRA rules for AFDC, SSI, and Social Security, combined with pre-OBRA Food Stamp Program rules;
- 5) Post-OBRA rules for AFDC, SSI, Social Security, and food stamps; and
- 6) Post-OBRA rules for AFDC, SSI, Social Security, and Food Stamps, combined with a counterfactual assumption regarding the total amount of Unemployment Insurance benefits.

Simulations 2 through 4 are counterfactuals which show the marginal effect of adding the post-OBRA rules in AFDC, SSI, and Social Security to the first simulation, which is a baseline of all programs as they would have existed had OBRA never been implemented. Simulation number 5 includes the actual post-OBRA rules in all programs, and the difference between this simulation and simulation number 4 is solely due to the changes in the Food Stamp Program. The last simulation is a counterfactual designed to demonstrate the significance of UI benefit programs for the food stamp caseload and benefits. As explained below, it is not a true counterfactual in the sense that pre- and post-OBRA UI benefit rules were simulated,¹ but it assumes that more monies would have been allocated to UI benefits in 1983, increasing the

1. The TRIM2 model does not include a detailed simulation of UI benefit rules.

number of unemployed person with benefits. All other simulations used the CPS reported amount of UI benefits.

Not all of the provisions shown in Table F.1 through F.5 were simulatable, but those that were excluded are relatively insignificant.¹ Table F.6 shows the legislative changes that were simulated. These can be cross-referenced with the details of the actual legislation presented earlier. The significance of the provisions omitted for each of the programs is discussed below.

For AFDC all of the legislative provisions during the 1981-1983 period were simulated except the changes in the treatment of other income (a portion of stepparent's income is now counted and a single lump sum payment can cause loss of eligibility in more than 1 month), proration, family reporting requirements, and eligibility for strikers and pregnant women. Of those provisions omitted, the treatment of stepparent income had the most significant effect on the AFDC program, but the interaction effect with the Food Stamp Program probably would not have been significant. The AFDC quality control survey showed that about 6 percent of AFDC units had stepparents in May 1981 compared to 3 percent in May 1982.² Presumably some families with stepparents lost their AFDC eligibility as a result of this OBRA provision. An effect on the food stamp caseload would not have been expected, however, because the total household unit would have been counted for income eligibility in the Food Stamp Program in both the pre- and post-OBRA periods. The only potential effect on the Food Stamp Program would have been

1. Provisions are typically omitted from the TRIM2 model because they are judged to be too insignificant to warrant the developmental and processing burdens; they are administrative in nature; or there is insufficient data on either the CPS or external data sources to implement them.

2. Unpublished data supplied by the Office of Family Assistance, Social Security Administration. This effect is also discussed in Weder (1983).

Table F.6

SIMULATED CHANGES IN PROGRAM LEGISLATION

Program	Legislation
AFDC	<ol style="list-style-type: none"> 1. Eligibility tests <ol style="list-style-type: none"> a. Introduction of gross income test b. Net income must be at least \$10 below state payment standard 2. Deductions <ol style="list-style-type: none"> a. \$30 and 1/3 earned income disregard applied as last deduction and only available for 4 months b. Cap on standard work expense deduction c. Cap on child care expenses 3. Resource limit reduced to \$1000 4. Eligibility of special groups <ol style="list-style-type: none"> a. Reduction in age of eligibility of children to 18
SSI	<ol style="list-style-type: none"> 1. Maximum benefit: COLA delay from July 1983 to January 1984; benefit increase of \$20/month for individuals and \$30/month for couples in July 1983
Social Security	<ol style="list-style-type: none"> 1. Cost of living increase: COLA delayed from July 1983 to January 1984
Food Stamps	<ol style="list-style-type: none"> 1. Eligibility test <ol style="list-style-type: none"> a. Gross income test of 130% of poverty introduced for non-elderly/disabled, combined with 100% net income test 2. Deduction <ol style="list-style-type: none"> a. Standard deduction frozen from January 1982 to October 1983 b. Dependent care excess shelter deduction frozen from January 1982 to October 1983 c. Earned income deduction reduced to 18% of earnings 3. Maximum allotment: frozen from January 1982 to October 1982; based on 99% cost of Thrifty Food Plan 4. Eligibility of special groups: students eligible only if head of household

an increase in food stamp benefits for families who retained food stamp eligibility but lost AFDC benefits. The potential size of this effect would be small, however, since the number of families who lost their AFDC benefits as a result of the stepparent's income provision was small relative to the total food stamp caseload.¹

The change in the SSI maximum benefit levels due to the simultaneous COLA delay and the permanent benefit increase was simulated. This was the only SSI program provision likely to affect the food stamp caseload and benefits. Similarly, only the COLA delay for Social Security beneficiaries was simulated, but this was the only provision likely to have a significant effect on the Food Stamp Program.

All of the important Food Stamp Program provisions were simulated. The one possible exception was the omission of the effect of the repeal of two provisions which were scheduled to go into effect in October 1981 but were recinded by the OBRA legislation. These were the addition of a separate dependent care deduction and the \$10 reduction in the medical cost exclusion for the elderly. These provisions were simulated separately and found to have an insignificant (.2 percent) effect on food stamp costs. The reason why they were not significant was that so few households claim these deductions. In August 1982, for example, only 1.7 percent of all food stamp households claimed the dependent care deduction, and 2.2 percent claimed the medical deduction. It may be true, however, that the additional dependent care deduction would have been claimed by more households. As mentioned earlier, the simulation cannot capture behavioral change. Estimates of the behavioral

1. At most, the benefits of 1.2 percent of the food stamp caseload would have been affected.

effect of these provisions must remain purely speculative, however, since the legislation recinded provisions which never took effect.

As mentioned earlier, the Unemployment Insurance benefits counterfactual was not an attempt to precisely simulate the pre- and post-OBRA UI program rules. TRIM2 does not include this type of simulation module. Rather, this was an attempt to provide a scenario which demonstrated the sensitivity of the Food Stamp Program to the availability of UI benefits. Recently Vroman (1984) estimated the total dollar effect of the federal changes in UI shown in F.5. He reported that the changes in the federal UCX and TAA programs¹ represented a \$1.0 billion cut in benefits in 1983, and that the federal extended benefits policies resulted in a \$4.4 billion cut in benefits for the long-term unemployed. Vroman also concluded that federal policies caused a \$3.3 billion reduction in state-provided regular UI benefits. The Vroman study represents a careful attempt to estimate the effects of the OBRA and TEFRA legislation on UI benefits. However, the estimates were based on an analysis of time series data and are, of course, subject to standard statistical error.

The UI counterfactual simulation assumes that \$5.4 billion additional dollars would have been paid out in benefits in 1983. All of the additional monies were distributed to unemployed persons without reported UI benefits in 1983. Benefits were distributed based upon historical receipt of benefits for unemployed persons disaggregated into 8 sex-age groups (men and women age 16-19, 20-24, 25-44, and 45 and older). The effect of a reduction in state benefits was not included, since assignment of federal responsibility for these cutbacks is somewhat speculative.

1. UCX: Unemployment for Ex-Service Members; TAA: Trade Adjustment Assistance.

Tables F.7 through F.9 show the results of the first four counterfactual simulations and the post-OBRA historic simulation. Shown are the net effects of the legislation on the population eligible for and receiving food stamps; the effects on households by their gross income levels as a percent of poverty; effects on average food stamp benefits for both eligible and participant households. Table F.10 presents the effects of the UI counterfactual simulation. The TRIM2 food stamp participant estimates were selected from the total pool of eligible households using a probability function. The TRIM2 probability function was based upon an analysis of historic participation patterns comparing the Food Stamp Quality Control data on participants to monthly estimates of eligibles in the Current Population Survey. The implications of the results presented in Tables F.7 through F.10 are discussed in Chapters III and VI.

Table F.7

NET EFFECT OF LEGISLATION IN OTHER TRANSFER PROGRAMS ON THE FOOD STAMP CASELOAD:
CHANGE IN HOUSEHOLDS ELIGIBLE OR RECEIVING FOOD STAMP BENEFITS DURING 1983¹

	(1)	(2)	(3)	(4)	(5)	(6)
<u>Number (000) of Food Stamp Households</u>	<u>Pre-OBRA Rules</u>	<u>AFDC Effect</u>	<u>SSI Effect</u>	<u>Social Security Effect</u>	<u>Total Interaction Effect</u>	<u>Food Stamp Effect</u>
Total Eligible Caseload	19,801	+ 6	- 22	- 1	- 17	- 1311
With AFDC	3,688	- 131	0	+ 2	- 129	- 21
With Earnings	13,133	+ 11	- 4	- 2	- 5	- 1174
With SSI	2,348	+ 75	+ 39	+ 59	+ 173	- 49
With Social Security	4,592	- 2	- 18	- 8	- 28	- 169
With Other Income	3,469	+ 22	- 1	+ 13	+ 34	- 245
Total Participant Caseload	9,955	- 46	- 8	+ 37	- 17	- 389
With AFDC	3,661	- 118	- -	+ 2	- 116	- 13
With Earnings	5,445	- 71	- 1	- -	- 72	- 312
With SSI	2,045	+ 53	+ 43	+ 50	+ 146	- 52
With Social Security	2,488	+ 28	+ 19	+ 21	+ 68	- 97
With Other Income	1,453	- 20	+ 3	+ 7	- 10	- 59

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SOURCE: TRIM2 estimates based on March 1984 Current Population Survey

1. Estimates show the number of households who would be eligible for or receiving food stamps at some time during the year

Table F.8

**EFFECT OF LEGISLATION IN OTHER TRANSFER PROGRAMS ON THE FOOD STAMP CASELOAD:
CHANGE IN FOOD STAMP HOUSEHOLDS BY GROSS INCOME AS PERCENT OF POVERTY**

Number of Households Eligible for Food Stamps During 1983 (In Thousands)						
Annual Gross Income As A Percent of Poverty	(1) <u>Pre-OBRA Rules</u>	(2) <u>AFDC Effect</u>	(3) <u>SSI Effect</u>	(4) <u>Social Security Effect</u>	(5) <u>Total Interaction Effect</u>	(6) <u>Food Stamp Effect</u>
50% or Less	3,793	+ 39	- 8	+ 3	+ 34	- -
51 - 100%	7,163	+ 37	- 25	- 12	- 3	- -
101 - 130%	3,138	- 51	+ 10	+ 9	- 32	- 149
131% and Over	5,709	- 19	+ 1	+ 2	- 16	- 1162
Total	19,801	+ 6	- 22	- 1	- 17	- 1311

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Number of Households Receiving Food Stamps During 1983						
Annual Gross Income As A Percent of Poverty	(1) <u>Pre-OBRA Rules</u>	(2) <u>AFDC Effect</u>	(3) <u>SSI Effect</u>	(4) <u>Social Security Effect</u>	(5) <u>Total Interaction Effect</u>	(6) <u>Food Stamp Effect</u>
50% or Less	2,220	+ 21	- 8	+ 4	+ 17	- -
51 - 100%	4,478	+ 29	- 21	+ 10	+ 18	- -
101 - 130%	1,256	- 58	+ 21	+ 13	- 23	- 85
131% and Over	1,952	- 39	- -	+ 10	- 29	- 303
Total	9,955	- 46	- 8	+ 37	- 17	- 388

SOURCE: TRIM2 estimates based on March 1984 Current Population Survey

Table F.9

NET EFFECT OF LEGISLATION IN OTHER TRANSFER PROGRAMS ON AVERAGE ANNUAL FOOD STAMP BENEFIT
AND AVERAGE ANNUAL GROSS INCOME FOR FOOD STAMP HOUSEHOLDS IN 1983

	(1)	(2)	(3)	(4)	(5)	(6)
Households Eligible For Food Stamps	<u>Pre-OBRA Rules</u>	<u>AFDC Effect</u>	<u>SSI Effect</u>	<u>Social Security Effect</u>	<u>Total Interaction Effect</u>	<u>Food Stamp Effect</u>
	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
Average Food Stamp Benefit	583	+ 1	- 2	- -	- 1	+ 19
Non-Elderly Households						
Average Gross Income	9,624	- 34	+ 3	- -	- 31	- 596
Average Food Stamp Benefit	639	+ 1	- 1	+ 1	+ 1	+ 25
Elderly Households						
Average Gross Income	5,974	+ 40	+ 23	+ 7	+ 70	- 104
Average Food Stamp Benefit	417	+ 2	- 10	- 1	- 9	- 15
	(1)	(2)	(3)	(4)	(5)	(6)
Households Receiving Food Stamps	<u>Pre-OBRA Rules</u>	<u>AFDC Effect</u>	<u>SSI Effect</u>	<u>Social Security Effect</u>	<u>Total Interaction Effect</u>	<u>Food Stamp Effect</u>
	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
Average Food Stamp Benefit	1,157	+ 8	- 8	- 2	- 2	- 5
Non-Elderly Households						
Average Gross Income	8,210	- 67	+ 5	- 1	- 63	- 299
Average Food Stamp Benefit	1,305	+ 18	- 4	- -	+ 14	+ 2
Elderly Households						
Average Gross Income	5,429	+ 35	+ 17	+ 8	+ 60	- 75
Average Food Stamp Benefit	765	- 8	- 17	- 8	- 33	- 23

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SOURCE: TRIM2 estimates based on March 1984 Current Population Survey

Table F.10

ESTIMATES OF THE EFFECTS OF AN INCREASE IN THE NUMBER
OF UNEMPLOYED PERSONS WITH UNEMPLOYMENT INSURANCE
BENEFITS DURING 1983

<u>Program Estimate</u>	<u>Post- OBRA¹</u>	<u>Unemployment Insurance Counterfactual²</u>
UI Benefits (Billions)	\$19.6	\$25.0
Persons with UI Benefits (000)	10,104	12,574
Food Stamps Eligibles		
Households, Ever-on (000)	18,478	16,953
Benefits (Billions)	\$18.814	\$17.018
Food Stamp Participants		
Households, Ever-on (000)	9,571	8,763
Benefits (Billions)	\$10.999	\$9.921

SOURCE: Historical post-OBRA UI benefits as reported in March, 1984 Current Population Survey. UI counterfactual and Food Stamp benefits are simulated estimates.

1. Historical simulation, includes post-OBRA legislation in all programs, including Food Stamps.

2. Counterfactual simulation assumes pre-OBRA legislation in federal UI programs (UCX, TAA) and an increase in extended benefits.